



**Dow Jones Sustainability Index –
A Case Study on Emerging Markets**

**by
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Bibliographic Note

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Abstract

Environmental questions have emerged some time ago and over time its importance has grown. These questions started to be assessed also in the business world, as the pressure to achieve better results and comply with better practices has been growing. Consumers and partners are becoming more demanding about the negative impact some companies may create to the planet and society. To respond to these needs, companies have begun to integrate in their strategies policies of Corporate Social Responsibility (CSR) to reduce their negative impact in the world. This new vision of the reality may influence the companies' performance, either directly or indirectly. Several approaches to evaluate this impact have surged, some in the form of sustainability indices.

The Dow Jones Sustainability Index (DJSI) is one of these indices that analyses companies from the entire world and all industries for its sustainable performance. DJSI Emerging Markets include only companies from emerging markets. Emerging markets have a special importance in the worldwide economy, but are usually wrongly associated with depreciative practices. Still, companies playing in a global world are able to incorporate these questions in their strategies.

We intend to develop a case study about companies included in the Dow Jones Sustainability Index Emerging Markets in 2013. With this paper, we want to contribute to a better understanding on how these companies develop their efforts to promote sustainability. We want to assess if the companies feel conditioned for developing their activities in an emerging market and how the recognition transmitted by the inclusion in the Index affected them. We also want to measure the employees' engagement and knowledge about the company's good practices.

Key-words: Sustainable development, sustainability, corporate sustainability, Dow Jones Sustainability Index, emerging markets

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1. Introduction

The concept of sustainable development was for the first time officially defined by the United Nations in 1987 in the Brundtland Report (WCED, 1987), but it has much older origins, with several experts discussing similar ideas before. United Nations defined sustainable development in the World Commission on Environment and Development Report (1987) as the capacity to satisfy the current needs without compromising the satisfaction of next generations' needs, therefore it must be endured in all countries, developed or developing. According to this definition, the sustainable development should consider economic, social and environmental factors.

Either because the law has enforced it or because they decided to do it voluntarily, companies have incorporated sustainable behaviors in their strategies and activities that reflect the increasing importance of environmental and social questions to business. As sustainable worries become more present in the companies routine, sustainability is not anymore seen as only an obligation, but also as a key differentiator for the company. Several sustainability indices have emerged in the last years that recognize the companies' efforts and reward them with the promotion of their positive results.

The Dow Jones Sustainability Index (DJSI) was considered by the United Nations Environment Program Finance Initiative as the most rigorous Index in the evaluation of the stock performance of the world's leading companies in terms of economic, environmental and social criteria (UNEP, 2008). The Index is developed cooperatively by Dow Jones Index and RobecoSAM (Dow Jones Sustainability Index (a), 2013). The indices are developed through a best-in-class approach; it includes only companies that fulfill certain sustainability criteria better than the majority of their peers. No industries or countries are excluded (Dow Jones Indices, 2013).

The DJSI has in its family the DJSI Emerging Markets Diversified that includes 20 emerging market countries and makes a global selection of the highest scoring companies in terms of relative Total Sustainability Score from RobecoSAM's annual Corporate Sustainability Assessments (RobecoSAM & S&P Dow Jones, 2013).

Emerging markets represent an important part of the global economy (ECB, 2013); they are expected to lead global growth in the next 10 years, and to provide important opportunities for investors, according to current research (BlackRock, 2010, Ernest &

Young, 2013). As competitiveness has increased, companies need to do more and find a way to differentiate themselves from the competition. The need to comply with standards and minimize differences and the wish to be different are leading these markets to change their positioning and increase sustainable considerations. Sustainability emerges as a need for growth (Nkamnebe, 2011).

This dissertation proposes to develop a case study including several companies from emerging markets that were included in the Dow Jones Sustainability Index in 2013. The objective is to try to understand how companies from emerging markets face sustainability and what type of measures they have been developing to include sustainable worries in their strategies. It is also important for us to understand if sustainability is a reality for the majority of the company's employees or only a concept known by the top management and related positions. In addition, we would also like to understand how the inclusion in the DJSI affected the company.

This dissertation is organized as follows. A literature review is made in section 2 covering the concept of sustainability and sustainable development, and their application in companies. After covering literature that supports the development of a sustainability strategy by corporations, we have started to focus on our object of study – companies from emerging markets. Several empirical studies covering corporate sustainability in the emerging markets and corporate sustainability leaders' performance are also reviewed.

In section 3, a literature review of studies supporting the sustainability reporting initiatives developed by companies is made. Although, the importance of reporting and consequently inclusion in sustainability indexes has been already referred in previous sections, in this section we find important to introduce a more detailed presentation of the the Dow Jones Sustainability Index.

In section 4, the methodology used in this dissertation is explained. We have conducted interviews and questionnaires with employees from 12 companies included in the DJSI Emerging Markets in 2013. The results obtained from the questionnaire and Hypotheses Tests are presented.

Finally, in section 5, a case study about Duratex, a Brazilian company included in the DJSI Emerging Markets in 2013, is built. We develop a descriptive analysis of the sustainability strategy of Duratex.

Section 6 concludes.

2. Sustainability in Business

Sustainability and sustainable development in a business context have been strongly discussed among the scholars. Several definitions can be found in the literature to describe sustainability and other concepts in this scientific area. Although general concordance about the basics of what should involve sustainability, there is not a universal concept or model and companies usually adapt their own. Also there is a huge discussion about the consequences of a company's implementation of sustainable measures among its practices. Despite the several studies made over the years, there still is not concordance among scholars about the benefits or not from these practices. However, more and more organizations have been pushing for more sustainable practices and companies have been developing more friendly approaches, either direct or indirectly related to their core business.

2.1.Sustainability, Sustainable Development, Corporate Social Responsibility and Corporate Sustainability

Sustainability and sustainable development are not new concepts; they exist and shape companies' reality for long time. The notion of sustainability has been traced to the thirteenth century (Nkamnebe, 2011). In the eighteenth century, Malthus in its systematic theory of population, presented the roots for the formation of the concept, but the definition of sustainability appeared in the environmental literature only in the 1970s (Kamara et al., 2006 in Nkamnebe, 2011). Meadows et al. (1972) defended that sustainability should address the challenges implied by the population growth.

Although the concept of sustainability has been discussed for years within the international community, there is still no consensus about its definition and what it really implies to companies. Though, it is common sense that a sustainability definition should include two contrasting objectives: preserving the existing ecosystems and meeting the economic needs (i.e., welfare indicators should equal the threshold) of all humans (Gatto, 1995). Sustainability is also linked to the idea of continuity and persisting, meaning that a definition of sustainability should concern short-term, and in particular, long-term (Costanza & Patten, 1995). "The core of the idea of sustainability is the concept that current decisions should not damage prospects for maintaining or

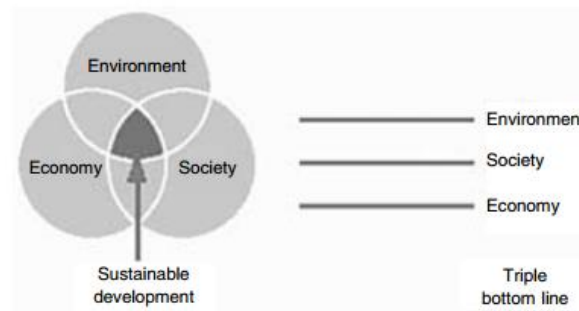
improving living standards in the future" (Pearson (1985) in Brown et al.1987, p. 716). Therefore, it is agreed that sustainability involves the reconciliation of three important dimensions: social, economic and environmental (United Nations, 2005). These three elements should be equally assessed; disregarding one of them would threat the whole sustainability (Dyllick & Hockerts, 2002; Kahuthu, 2006 in Ciegis et al., 2009). The three fundamental pillars of sustainability were first mentioned in the Rio de Janeiro Conference on Environment and Development in 1992 (Dyllick & Hockerts, 2002; United States Department of Economic and Social Affairs (DESA), 1992 in Zink, 2005). These three pillars have been used to develop standards and certification systems, requiring compliance within these three areas (Manning et al., 2011; Reinecke et al., 2012).

In what concerns companies, sustainability can be defined as:

"Sustainability is a company's capacity to prosper in a hypercompetitive and changing global business environment. Companies that anticipate and manage current and future economic, environmental and social opportunities and risks by focusing on quality, innovation and productivity will emerge as leaders that are more likely to create a competitive advantage and long-term stakeholder value." (RobecoSAM & S&P Dow Jones, 2013, p. 7)

Directly related to sustainability is the concept of sustainable development (SD). Similarly to what happens with sustainability, there are several definitions; economic literature offers over 100 definitions (Jacobs, 1995 in Ciegis et al., 2009), but none of them refers all the aspects of the concept and provide perfect understanding of it (Ciegis et al., 2009). Again, as it happens with sustainability, there is a general acceptance about what sustainable development should include: "sustainable development should ensure the production while preserving the environment as well as the development and stabilization of economic and social behavior" (Schulz et al., 2001 in Zink, 2005, p. 1046). This means, to achieve sustainable development the three dimensions of sustainability should be harmonized. They are interrelated and therefore should not be considered independently (Sage, 1999; Waas et al., 2010). The Venn in Figure 1 is an exemplification of this equilibrium.

Figure 1 - Venn Diagram of Sustainable Development



Source: Parkin et al., 2003, p. 19

The most well-known definition of sustainable development was proposed by the United Nations in the Bruntland Commission (WCED, 1987, p. 37):

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (...) Thus the goals of economic and social development must be defined in terms of sustainability in all countries - developed or developing (...).”

Other definitions may be mentioned including different characteristics:

“[...] Sustainable development, in essence, involves progress towards development that simultaneously takes economic, environmental and social elements into account. It also requires temporal and spatial depth.” (Ricart et al., 2005, p. 20)

And may also be regarded as:

“A system of affairs that secures continuous and indefinite provision of welfare for society through the implementation of practices which satisfy human needs and, at the same time, take into consideration ethical and environmental issues which are left aside in the normal functioning of the economy” (Argyris & Tsaliki, 2005, in Nkamnebe, 2011, p. 219)

These definitions, like most of publications, define SD as much an economic necessity, as an environmental and social necessity (Wilson, 2003). However, most definitions focus on the role of companies in sustainable development (environmental, social and economic performance), they do not clarify why corporations should care about these issues (Wilson, 2003). Still, many corporations and businesses have shown their support for the principles of sustainability and sustainable development.

Other concepts have emerged in the literature that defend / claim for corporations to include and support SD and implement more sustainable strategies, such as Corporate Social Responsibility (CSR) and Corporate Sustainability.

CSR has been discussed among scholars once the role of business in society has become an unavoidable issue with the emergence of the thematic of sustainability. The definitions of CSR are many, but little is the agreement on what CSR really means and what are its consequences (Lantos, 2001, O'Dwyer, 2003, Valor, 2005 in Wilson, 2003). Additionally, not all these definitions refer to the same (Dahlsrud, 2006). However, similarly to the previous concepts, there is some level of agreement on what CSR should consist and include. CSR principles are based in the belief that corporations have an “ethical obligation” to include social and environmental concerns in business operations and in the interactions with stakeholders (Commission of European Communities, 2001; Wilson, 2003). More, CSR should be voluntary by definition, meaning that companies should not only fulfill legal expectations, but also going beyond compliance and investing more into human capital, the environment and the relations with stakeholders. (Commission of European Communities, 2001; Carroll, 1979, COM, 2001, Windsor, 2006 in Halme et al., 2009). According to Dahlsrud (2006), CSR should include five dimensions: the environmental dimension, the social dimension, the economic dimension, the stakeholder dimension, the voluntariness dimension.

CSR can be defined as:

“A socially responsible corporation should take a step forward and adopt policies and business practices that go beyond the minimum legal requirements and contribute to the welfare of its key stakeholders.” (Frooman, 1997, p. 227, in Tsoutsoura, 2004, p. 3)

Or: *“CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.”* (Ashridge, 2005, p.3, in Baskin, 2006, p. 7)

Some authors have defended that CSR is “an intermediate stage” to achieve corporate sustainability and sustainable development, the ultimate stage where companies try to balance the Triple Bottom Line (van Marrewijk, 2003; Figge & Hahn, 2004; Skare & Golja, 2012). Corporate Sustainability appears as a more comprehensive concept that includes elements of other concepts: sustainable development, CSR, stakeholder theory and corporate accountability theory (Wilson, 2003). According to Wilson (2003), through the conjugation of these four concepts, corporate sustainability

emphasizes on environmental, social and economic performance, and the public reporting: *“Sustainable development sets out the performance areas that companies should focus on, and also contributes to the vision and societal goals that the corporation should work toward, namely environmental protection, social justice and equity, and economic development. Corporate social responsibility contributes to ethical arguments and stakeholder theory provides business arguments as to why corporations should work towards these goals. Corporate accountability provides the rationale as to why companies should report to society on their performance in these areas.”* (Wilson, 2003, p. 5)

In a simple way, RobecoSAM & S&P Dow Jones (2013) define corporate sustainability as *“a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments.”*

Perrini & Tencati (2006, p. 298) describe it as *“A sustainability-oriented company is fully aware of its responsibilities towards the different stakeholders and adopts methods and tools that allow it to improve its social and ecological performance. (...) A sustainability-oriented company is one that develops over time by taking into consideration the economic, social and environmental dimensions of its processes and performance.”*

2.2.Sustainability in the company

Over the years, the discussion among the academic community about the inclusion of sustainability into corporations' strategy and their responsibility to get involved with its values and principles has been very extensive. Since those times, when discussions about sustainability in the business world were still in its early stages, there were already supporters in favor and against corporate sustainability. Several theories were developed to support both sides. Today, these theories are still used to justify or not the adoption of a more sustainable behavior by corporations.

The main theory beyond the opponents of the incorporation of sustainability concerns in corporations' strategy is the trade-off hypothesis developed by Milton Friedman in the 1960s (van Marrewijk, 2003; Salzmänn et al., 2005). According to this theory, *“the social responsibility of business is to increase its profits”* (Friedman, 1962

in van Marrewijk, 2003). Therefore, business organizations should pursue profit maximization as its focal goal in order to maximize their shareholders wealth, the only ones to which they (companies) are responsible and should answer for. In addition, Friedman also formulated that such responsibilities (e.g. socially and environmental responsible activities) do not belong to the domain of organizations and should be a task for governments (Foley, 2000 in van Marrewijk, 2003; Salzmann et al., 2005). Thus, corporations would be concerned with social and environmental issues only to the extent that they contribute to the purpose of their business: creation of long-term value for the shareholders/owners of the business. To become involved in social and environmental topics brings extra expenses and decreases the earnings of the firm, compromising the main objective of the company (profitability). Consequently, in the short term, the company could then be in a disadvantageous position compared to a company which is not involved in sustainable activities.

Other theories, based on similar beliefs, were developed such as the managerial opportunism hypothesis (Preston & O'Bannon, 1997 in Salzmann et al., 2005) and negative synergy (Preston & O'Bannon, 1997 in Salzmann et al., 2005). These theories argue that the involvement in sustainable activities has a negative impact on the company's financial performance (Vance, 1975, Moore, 2001 in Tsoutsoura, 2004; Salzmann et al., 2005).

On the other hand, several theories supporting sustainability and its adoption by corporations have emerged in the last years. Among the most well-known are: the stakeholder theory, the supply and demand theory of the company, the social impact hypothesis, societal approach, legitimation theory (Salzmann et al., 2005; Saleh et al., 2011). The scholars behind these theories urged for the need of the implementation of sustainable strategies and pointed positive effects and benefits for enterprises.

The stakeholder theory was formulated by R. Edward Freeman and it claims that corporations' responsibilities go beyond shareholders only and that they have responsibilities to a larger group of stakeholders¹ (Freeman, 1984 in Salzmann et al., 2005). According to this theory, the company's objective is to create sustainable wealth

¹ Freeman defined stakeholders as those groups without whose support the organization would cease to exist" (Freeman, 1984, p. 13 in Zink, 2005). Therefore, a shareholder is "any group or individual who can affect or is affected by the achievement of the organization's objectives." According to this definition, stakeholders are "individuals and constituencies that contribute, either voluntarily or involuntarily, to its wealth-creating capacity and activities, and therefore its potential beneficiaries and/or risk bearers" (Post et al., 2002, in Zink, 2005). Groups of stakeholders include customers, shareholders, employees and society as a whole.

over time for its multiple constituencies (stakeholders) (Wilson, 2003; Ricart et al., 2005; Salzmänn et al., 2005; López et al., 2007; Saleh et al., 2011). Thus, to generate sustainable wealth, the company's objective should not be only to produce economic value but rather economic, ecological, and social value (Elkington, 1997 in Ricart et al., 2005). Many have used this theory to justify the benefits (financial and others) for corporations to include sustainability in their strategies (Wilson, 2003; Salzmänn et al., 2005; Ricart et al., 2005; Barnett, 2007, Jones, 1995, McGuire et al., 1988, Cornell & Shapiro, 1987 in Saleh et al., 2011). Companies might gain competitive advantage from sustainability strategies (Hart & Ahuja, 1996, Porter & van der Linde, 1995, Shrivastava, 1995, Hart, 1995, Rodríguez et al., 2002, Hart & Sharma, 2004 in Ricart et al., 2005).

Based on the belief that a larger group of stakeholders are influenced and influence companies' results, the supply and demand theory of the company justifies that companies can maximize their profits through the involvement with social and environmental initiatives (McWilliams & Siegel, 2001 in Salzmänn et al., 2005; Saleh et al., 2011).

The social impact hypothesis supports the vision that the involvement with social and environmental causes has positive effects on a company's financial performance, for instance through reputation (Salzmänn et al., 2005; Cornell & Shapiro, 1987 in Saleh et al., 2011).

According to the societal approach, companies are an integral part of society and should be responsible to it as a whole (McGuire, 1963, Goodpaster & Matthews, 1982, Committee for Economic Development – CED, 1971, van Marrewijk, 2001, Göbbels, 2002 in van Marrewijk, 2003).

The legitimization theory affirms that companies can improve their overall performance through environmental and social problems solving, because they need to achieve society's approval in order for the company to survive (Campbell et al., 2002, Deegan, 2000, Deegan & Gordon, 1996, Deephouse, 1996, Guthrie & Parker, 1989, Patten, 1992 in López et al., 2007).

All these theories, contrary to theories opposing to corporate sustainability, look for the long-term effects of corporate sustainability rather than the short-term vision of costs increasing (Lapinskiene, 2011).

Nowadays, an increasing number of companies is getting involved with sustainable initiatives and adopting a more sustainable position for their businesses. Still, little is

known about how to implement sustainability in enterprises and what is the best strategy to adopt. Scholars have debated that sustainable ideals should be included and applied jointly with the company's policies, practices, and programs, by integrating it in the firm's operations, supply chains, and decision-making processes (Tsoutsoura, 2004; López et al., 2007; Baughn et. al., 2007). However, questions remain about the best approach to adopt.

Some authors claim that the increasing concerns about sustainability and the emergence of responses, such as Corporate Social Responsibility (CSR), are the result of the acceleration of the globalization process (Swift & Zadek, 2002 in Skare & Golja, 2012). Therefore, CSR and sustainability tend to be seen as an international reality that all organization from all over the world should adopt. To promote sustainability homogeneously several international standards have appeared in the last years with the purpose of guiding companies in their mission to achieve sustainable development, such as ISO (International Organization for Standardization), GRI (Global Reporting Initiative) and the UN global compact, or rating agencies such as the DJSI (Halme et al., 2009).

Moreover, the global trend of corporate sustainability has been pushed mainly by developed countries, CSR theories, concepts and ideas are mainly centered in the US and European markets (Halme et al., 2009). Sustainability in a business context primarily originates from market economy countries with relatively strong institutional environments in which regulation is efficient and fairly enforced (Halme et al., 2009). Non-Governmental Organizations (NGOs) may also play a fundamental role promoting corporate sustainability, as these organizations pressure companies to be more socially responsible and increase concerns with the environment in which they operate (Nik Ahmad et al., 2003; Haniffa & Cooke, 2005). Despite pressure from governmental institutions and other organizations, there are also other agents (e.g. consumers, employees, investors, business partners, etc.) to who companies have to answer and demand more social responsibility from them.

Alternatively, other approaches that defend the development of corporate sustainability locally have emerged. This vision is based in the idea that contextual aspects (e.g. economic, political and social systems) matter when implementing sustainable measures, because business is not an independent activity (Halme et al., 2009). Differences regarding geographic, cultural, political, industrial and economic settings and environmental conditions have contributed to the increasing discussion of

contextual awareness in CSR (Halme & Laurila, 2009). Gjolberg (2009) concludes that the country of origin matters to companies' sustainable practices. Consequently, the "one solution fits all" definition for corporate sustainability should be abandoned and more specific definitions should be elaborated (van Marrewijk, 2003). These definitions should take into consideration contextual (external) aspects, as well as company specific characteristics (development, awareness and ambition levels of organizations regarding sustainability) (Cerin & Dobers, 2001; Epstein & Roy, 2001; van Marrewijk, 2003). Thus, defining a company's sustainable strategy is a critical process, because without the appropriate organizational structure and management systems, enterprises may not reap all the benefits associated with sustainability performance.

2.2.1. The impacts of sustainability on companies' performance – Empirical studies of corporations listed in sustainability indexes and emerging markets

Regarding the focus of this dissertation (companies from emerging markets included in the DJSI), it is our aim to verify the relationship between the inclusion in the index and performance experienced by companies, being our conviction that this relationship is positive. Thus, in this section, special attention was given to relevant literature covering companies that fulfill these characteristics (companies from emerging markets² or companies included in the DJSI) and empirical studies that presented a positive link between performance and sustainability.

Most empirical studies that verify impacts provoked by sustainable policies focus on visible economic and financial measures. Financial impacts are frequently the first concern when looking for impacts of sustainability, because it is the easiest to measure and the most obvious, at least in the short-term (Tsoutsoura, 2004). Additionally, financial performance is very important for investors and consequently a main concern for companies, as financial markets are increasingly powerful at the global level (Murray et al., 2005).

However, due to the impossibility to find direct economic and financial positive effects (at least in the short-term), researchers have started to look for indirect and

² A more assertive definition of Emerging Markets and the state of corporate sustainability in these markets will be done in the section 2.3. However, given the main focus of this dissertation, it becomes necessary to mention some concepts before a definition is done, to keep the coherence of the research.

usually difficult to measure consequences, as the ones originated by brand image improvements. Positive effects are usually longer to verify than the negative ones because in the short-term the company incurs in an expense to increase social activities while the results will only appear later (Tsoutsoura, 2004). Additionally, investors have become more sensible to non-financial matters and looking to diversify their investments (Murray et al., 2005). Thus, it is believed that investors have an important role monitoring and encouraging sustainability in businesses (Murray et al., 2005).

In this section, several empirical studies that verified the effects of sustainability in companies' financial performance, reputation and brand image are analyzed.

Lu et al. (2014) examined 84 empirical studies of the relationship between sustainable performance and financial performance published in the decade between 2002 and 2011. They concluded that despite a vast amount of relevant studies, the link between sustainable performance and financial performance remains inconclusive. Still, many studies in the field have found positive relationship between corporate responsibility and corporate financial performance (Orlitzky et.al., 2003; Klassen & McLaughlin 1996, Allouche & Laroche, 2005, Bird et.al., 2007, Beurden & Gossling, 2008 in Skare & Golja, 2012).

Skare and Golja (2012) developed a comparative analysis of financial performances of 45 CSR corporations listed on the Dow Jones Sustainability World Index (DJSWI) 2009/2010 and 45 non CSR corporations (meaning not being listed on DJSWI), covering the period 2006 –2008. Their study analyzed impacts in total revenue, net income, net operating income and demonstrated the existence of strong positive nexus between corporations financial performances and socially responsible behavior. Saleh et al. (2011) analyzed the impact of sustainability in financial performance through in 200 Malaysian companies during a seven-year period. The results found by them demonstrated a positive and significant relationship between CSR and CFP (Corporate Financial Performance). However, limited evidence of the relationship between CSR and CFP in the long-term was found. Another study by Ortas et al. (2012) explored the link between financial performance and sustainability in Brazilian companies included in the SRI equity index in the Latin American context. They concluded that contrarily to the modern portfolio theory, which predicts the negative financial performance of SRI (Social Responsible Investment) equity indexes due to social and environmental investments, promoting corporate sustainability does not result in a risk or return disadvantage in bullish market periods.

Impacts of sustainability have been measured also through other financial indicators, such as share price response (Richardson et al., 1999, Gray et al., 2001, Orlitsky & Benjamin, 2001, Wagner, 2001, Toms, 2002, Patten, 2002, Lorraine et al., 2004 in Murray et al., 2005). Lapinskiene (2011) analyzed the data of Dow Jones group indices and Stoxx600 family indices on the period from January 2005 to March 2011 to check a positive relationship between stock market performance and corporate sustainability. Contrarily to the expected positive association, he found that the performance of indices covering only sustainable corporations was worse than the overall market index during the whole period. Conversely, Konar & Cohen (2001 in Wagner, 2010) found that low environmental performance has a negative effect on the market valuation of a firm. Dowell et al. (2000 in Wagner, 2010) also looked whether the implementation of global environmental management standards increases firm value. Their work suggests positive impulses from social and environmental performance on the economic performance of firms. For its turn, Lourenço et al. (2012) developed empirical analysis covering 600 firms from Canada and the United States of America in the Dow Jones Global Total Stock Market Index (DJGTSM), some of those were listed DJSI North America and other did not, in 2009. They showed that Corporate Sustainable Performance (CSP) impacted positively stock prices. Further, they verified “what investors really do is to undervalue large profitable firms with low level of CSP.” As a result, companies, which do not invest in sustainability, are penalized by the market.

Other financial indicator used by scholars is the risk of portfolios. Humphrey et al., (2012) investigated the impacts of ESG (environmental, social and governance practices) on performance and risk. They studied 256 UK companies included in the Sustainability Asset Management Group GmbH (SAM), provider of the DJSI. They found no evidence of a difference in the risk-adjusted performance of portfolios comprising firms with high and low CSP. However, they found some evidence of firms with high CSP being larger, and perhaps having lower systematic risk.

Additional financial benefits (as result of the implementation of sustainable strategies) can be obtained through cost or liability avoidance (Gunthorpe, 1997, Hughes, 2000 in Murray et al., 2005); revenue-generating (McIntosh et al., 1998 in Murray et al., 2005). More benefits may also be reached through best-in-class management practices (Stone, 2000 in Murray et al., 2005).

Despite the importance of financial measures as indicator of enterprises' performance, there are other indicators that should be analyzed. Scholars have claimed sustainability strategies can grant companies competitive advantages over firms that do not adopt them (Sage, 1999; Bebbington, 2001; King, 2002, Adams & Zutshi, 2004 in López et al., 2007). For instance, organizations constantly seek elements to differentiate themselves from their competitors and sustainability is a way for differentiation, generating long-term sustainable competitive advantages (Sage, 1999; Bebbington, 2001; Collin & Porras, 1994, Gladwin et al., 1995, Makower, 1994, Scott & Rothman, 1994 in López et al., 2007; Walker & Mascini, 2013). Other competitive advantages may be achieved through efficiency cost savings and product stewardship (Porter & van der Linde, 1995, Shrivastava, 1995, Hart & Ahuja, 1996 in Ricart et al., 2005; McMillan, 1996 in Murray et al., 2005), acquisition of strategic resources and capabilities (Hart, 1995, Rodríguez et al., 2002 in Ricart et al., 2005), and development of learning and dynamic capabilities (Hart & Sharma, 2004 in Ricart et al., 2005). Other benefits include: resisting other negative market impacts; improving product and process design, operational controls, self-audits to control and reduce waste production and other environmental impacts; avoiding negative press coverage and consumer boycotts; maintaining employee morale; and increasing corporate reputation (Epstein & Roy, 2001; Wagner, 2010). At the end of the day, these are important measures that impact corporate financial well-being.

Reputation is believed to be one of main reason for most companies to consider sustainability issues and corporate sustainability (World Economic Forum, 2003 in Ricart et al., 2005). Many studies have shown that corporate social and environmental performance is positively associated with corporate financial performance, particularly through the medium of reputation (Orlitzky et al., 2003; Wagner, 2010). Corporate brand is seen as a core component of corporate reputation (Fan, 2005) and a unique opportunity for corporations to trigger consumer perception (Martinez et al., 2007; Wagner, 2010). Through and by reputation, companies engaging in sustainability would be rewarded by their stakeholders and ultimately, in the long run, this would be reflected in superior financial performance (Moneva & Ortas, 2008, Porter & Kramer, 2006, Roberts & Dowling, 2002, Zairi & Peters, 2000 in Melo, 2009). Sustainability activity is a way of changing a bad image of a company, especially for companies that have a negative reputation (Yoon et al., 2006). With improved social and environmental performance reputations, companies can improve their relationships with creditors and

suppliers, thus attracting better employees and more consumers (Orlitzky et al., 2003; Wagner, 2010; Skare & Golja, 2012). It may also help to attract a positive response from institutional investors (Mahoney & Roberts, 2007). Corporate sustainability creates a reputation that a firm is reliable and honest (McWilliams & Siegel, 2000), thus financial improvement is not directly linked to corporate sustainability itself, but associated to reputation or image status gained through corporate sustainability. Adams et al. (2012) studied the impact of corporate sustainable efforts in brand loyalty and corporate reputations in firms included in the DJSI in the year 2008 and 2009. The results showed that the adoption of sustainable behaviors can help to build brand loyalty and corporate reputations in the long term. Moreover, it could be also positively correlated to long-term shareholder wealth maximization.

Furthermore, benefits associated to an improved brand image include less risk of negative rare events (Tsoutsoura, 2004), socially responsible companies are more transparent and have less risk of bribery and corruption. They may also implement stricter and, thus, more costly quality and environmental controls, but they run less risk of having to recall defective product lines and pay heavy fines for excessive pollution. Some sustainable initiatives can dramatically reduce operating costs. Companies perceived to have a strong sustainable commitment often have an increased ability to attract and to retain employees (Turban & Greening 1997 in Wagner, 2010), which leads to reduced turnover, recruitment, and training costs. Companies that improve working conditions and labor practices also experience increased productivity and reduced error rates (Tsoutsoura, 2004). Although corporate sustainability can be associated with a series of bottom-line benefits (Tsoutsoura, 2004), these ones are not always immediate, costs and benefits may have different timeframes; the costs are immediate, while the benefits need a longer period to be realized. Corporate sustainability is recognized to create long-term value (Bebbington, 2001; Sage, 1999).

Table 1 - Summary of empirical case studies verifying the effects of corporate sustainability

Relationship studied	Source	Details	Research object	Timeframe	Results
Sustainable performance and financial performance	Lu et al. (2014)		84 empirical studies	Between 2002 and 2011	Inconclusive
	Lapinskiene (2011)	Measurement of stock market performance	Dow Jones group indices and Stoxx600 family indices on the period	From January 2005 to March 2011	Negative
	Skare and Golja (2012)	Analysis of the impacts in total revenue, net income, net operating income	45 CSR corporations listed on DJSWI and 45 non CSR corporations (meaning not being listed on DJSWI)	Between 2006 and 2008	Positive
	Saleh et al. (2011)	Analysis of the relationship between CSR and CFP	200 Malaysian	Between 1999 and 2005	Positive
	Ortas et al. (2012)	Analysis of the impact of normative and mimetic pressures associated with GC/GRI membership	207 public firms from six Latin American countries	2008	Positive
	Lapinskiene (2011)	Analysis of the relationship between stock market performance and corporate sustainability	Analysis of the data of Dow Jones group indices and Stoxx600 family indices	Period from January 2005 to March 2011	Negative
	Lourenço et al. (2012)	Analysis of the relationship between Corporate Sustainable Performance (CSP) and stock prices	600 firms from Canada and the United States of America in the Dow Jones Global Total Stock Market Index (DJGTSI), some of those were listed DJSI North America and other did not	2009	Positive
	Humphrey et al., (2012)	Analysis of the impacts of ESG (environmental, social and governance practices) on performance and risk.	256 UK companies included in the Sustainability Asset Management Group GmbH (SAM)	Between 2002 and 2010	Inconclusive
	Murray et al. (2005)	Explore whether stock market participants in the UK exhibit any discernible reaction to the social and environmental disclosures.	100 companies selected from the Times 1000 in the UK	Between 1988 and 1997	Inconclusive
	Ricart et al., 2005	Analysis of the relationship between corporate governance and sustainable development	18 leaders in their market sectors included in the DJSWI	2002	Positive
	Tsoutsoura, 2004	Analysis of the relationship between corporate social responsibility and financial performance	422 between included in the S&P 500 index	Between 1996 and 2000	Positive
	Adams et al. (2012)	Examine the impact that the pursuit of sustainability has on the financial performance of a firm	107 companies included DJSI and 107 companies included in the S&P 500	Between 2008 and 2009	Inconclusive
	Mahoney & Roberts, 2007	Analysis of the relationship between CSP and financial performance (FP) (using ROA and ROE) and institutional ownership	1198 observations of the CSP ratings for companies listed on the TSE 300	Between 1996 and 1999	Positive
	McWilliams & Siegel, 2000	Analysis of the relationship between CSP and financial performance, through measurement of R&D intensity	524 firms, obtained from KLD data and Compustat	Between 1991 and 1996	Neutral
Sustainable performance, reputation and brand image	López et al., 2007	Analysis of the differences in the performance between firms that develop sustainability and companies do not develop	102 firms belonging to the DJSI and to the Dow Jones Global Index	Between 1998 and 2004	Positive
	Wagner, 2010	Analysis of the link of corporate sustainability performance with economic performance	2478 observations from financial databases and Kinder Lydenberg Domini	Between 1992 and 2003	Inconclusive
	Melo, 2009	Analysis of the effects of CRS on the creation of competitive advantages, measured through risk, ROA and R&D Intensity	54 corporations/brands in the KLD database	Between 2001 and 2003	Positive
	Yoon et al., 2006	Analysis of the relationship between CSR and image promotion	128 students	2006	Positive
	Orlitzky et al., 2003	Analysis of the relationship between CSP and CFP (Corporate Financial Performance) (and reputation)	52 studies, yielding a total sample size of 33,878 observations	30 years	Positive

2.2.1.1. Measuring the impacts of sustainability

To improve performance and maximize the effects of the implementation of corporate sustainability, companies need to measure the impacts of sustainability actions and their consequences on organizations' performance. In order to make effective decisions, it is necessary to better understand the drivers of both costs and revenues and the actions that they can take to affect them and how they affect overall profitability (Epstein & Roy, 2001). Organizations and their managers must know the impact of company products, services, processes and other activities on either the external or internal environment (including the various stakeholders) or on the company (Epstein & Roy, 2001). Therefore, sustainable initiatives should be associated with specific sustainability performance indicators (Epstein & Roy, 2001). Several instruments for the management of corporate sustainability have been created, for instance Environmental Management Systems (EMS) under ISO 14001 or EMAS, systems for the management of social aspects under SA 8000 or Occupational Health&Safety Standard (OHSAS) according to OHSAS 18001 (Bieker, 2002). These instruments provide managers and enterprises with guidance as they choose, design, and implement their sustainable strategy to help managers in making decisions to improve corporate value creation (Epstein & Roy, 2001).

Companies, which implement environmental strategies and policies, can use several quantitative indicators to measure their impacts through the measurement of mass, energy and pollutant flows (e.g. emissions of greenhouse gases or other air pollutants, total energy input, water availability/stress (state) and water use (pressure)) or different specifications of environmental performance, linked to end-of-pipe or pollution prevention orientations (Lenzen et al., 2004; Wagner, 2005). But, another relevant part of the impact of the implementation of sustainable strategies by organizations, and which might be very difficult to measure (quantify), is stakeholders' reaction. Stakeholders may affect revenues and costs and long-term corporate performance on many levels (Epstein & Roy, 2001). As presented in the last section, companies gain competitive advantages through stakeholder relationships (e.g. customers with their loyalty; employees with their commitments and efforts). The advantage stakeholders provide has been recognized as a driver of strategic success (Epstein & Roy, 2001). Consequently, it is relevant for companies to identify and

include in their assessments the key stakeholder groups that are the primary drivers of their strategy³. Organizations need to develop their strategies in line with their most relevant relationships, customizing their approaches.

2.3.Sustainability in companies from emerging markets

“Emerging markets are countries that are restructuring their economies along market-oriented lines and offer a wealth of opportunities in trade, technology transfers and foreign direct investment. Emerging markets is used to describe a nation’s social or business activity in the process of rapid growth and industrialization.” (Schouwstra, 2011)

The term emerging market (EM) refers to a “developing” country, facing strong economic, political and social changes (Baskin, 2006). These regions are characterized by rapid growth driven by a fast industrialization and cheap value added production. According to Schouwstra (2011), a large number of these countries are political instable and are experiencing institutional and regulatory changes that led to an increase in market liberalization and privatization. These are large economic markets, which proportionate their investors with huge returns; but still they usually present lower-than-average per capita income and huge inequality with poor distribution of resources amongst their large populations. These particular markets present several environmental and social problems, such as low levels of education, lack of protection of property rights, lack of transparent judicial systems and enforcement of the law and corruption (Center for Knowledge Societies, 2008; Schouwstra, 2011).

According to the MSCI (Morgan Stanley Capital International) Emerging Market Index, there are 23 emerging markets: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates (MSCI Research, 2013).

³ One of the most applied and appropriate conceptual framework for sustainability management is the Balanced Scorecard (BSC) (Bieker et al., 200, Figge et al., 2001, Orssatto et al., 2001 in Bieker, 2002). This tool was developed by R. Kaplan and D. Norton in the early 1990s and it helps companies to better manage intangible assets (e.g. intellectual and organizational capital). BSC aims at integrating such intangible assets, non-financial assets (e.g. environmental and social ones) in the management system in a more efficient way (Bieker et al., 2001 in Bieker, 2002). Other essential aspect of the BSC is the integrations of “relevant” stakeholders of the company in its evaluation.

EMs (Emerging Markets) have received lots of attention, as they attract large industries and are responsible for enormous growth. According to the IMF (International Monetary Fund), in 2012, emerging markets accounted for almost all of global growth (IMF, 2012). Due to its enormous potential, these areas have evolved into a robust investment opportunity, increasingly attracting investment flows from developed markets (Dow Jones Sustainability Index, 2013). These are markets with strong international components that involve several players from different realities (clients, suppliers, investors, partners, competitors and others). However, emerging economies' growth is facing challenges, such as resource scarcity and a rapidly rising population on a larger magnitude than experienced by the economies that developed at the beginning of the 20th century.

Considering the emerging markets importance in the business world and increasing challenges faced, there is a need to evaluate the reality in these markets. For far the largest part of corporate sustainability literature and frameworks reflects the reality of North America, Europe and Australia examples (Jamali & Mirshak, 2007). This is reflected directly in the theories created, which are embedded with their values and models of business and society (Quazi & O'Brien 2000 in Colwell & Beckman, 2007; Halme et al., 2009).

Little is known about the corporate sustainability initiatives hold in emerging markets, both on the part of multinational firms and national firms (Colwell & Beckman, 2007; Lourenço & Branco, 2013). Additionally, these markets are frequently associated to depreciative stereotypes and assumptions regarding sustainability, such as the belief that economic wealth is more important than environmental or social concerns (Colwell & Beckman, 2007; Lourenço & Branco, 2013). Most work has been country specific (Baskin, 2006), and covers multinational companies. Few studies cover activities undertaken by local firms in emerging markets (Muller & Kolk, 2009). The lack of research covering emerging markets and sustainability has contributed to the establishment of corporate sustainability concepts and theories according to the reality of developed countries.

Emerging countries are characterized by less than favorable contextual conditions for corporate sustainability (Jamali & Mirshak, 2007), such as weak institutions and governance, and social gaps beyond the provision of government or NGOs, leading corporate sustainability to be promoted by private sector. Many companies in these regions still lag behind in terms of sustainability strategies, but they are not so far away

from the reality in developed countries in some aspects. For instance, Baskin's (2006) finding indicates that there is not a vast difference in CSR reporting between leading companies in high-income OECD (Organisation for Economic Co-operation and Development) countries and their emerging market peers. Also RobecoSAM (2013) claims the resemblances among these two realities: in Figure 2 is possible to see that the difference in practices across social, economic, and environmental dimensions between the DJSI World and DJSI Emerging Markets is remarkably narrow. Particularly along social dimensions such as stakeholder management and labor practice indicators, leading emerging market companies have reached the standards of industrialized nations (Dow Jones Sustainability Index, 2013). For instance, Muller & Kolk (2009) study covering companies in the Mexican auto industry indicated that corporate sustainability activities and levels are comparable to what is known about corporate sustainability in developed country.

Figure 2 - DJSI Emerging Markets Sustainability Performance vs. DJSI World



Source: Dow Jones Sustainability Index, 2013

But corporate sustainability in EMs usually assumes a different reality than the one known in developed countries, corporate sustainability activities are less formalized in terms of corporate sustainability benchmarks (Saleh et al., 2011) and promoted through philanthropy or charity⁴ (Jamali & Mirshak, 2007), have the form of an economic contribution⁵ and are related to traditional and spiritual values⁶. Frynas (2005) found that in emerging markets philanthropic activities of companies fill the gaps left by the governments' regulation; while in western countries governments' have been the main

⁴ E.g. social investment in education, sport sponsorships, and public health, and other community services, etc.

⁵ E.g. work opportunities, knowledge transfer, paying taxes, etc.

⁶ E.g. associated with "socialism", catholic values.

boosters for a corporate sustainability policy (Zink, 2005). Weak governance and regulatory systems have limited corporate sustainability take-up (Kemp, 2003 in Baskin, 2006). Nevertheless, in the last years local governments and global NGOs have been raising awareness for the need to apply sustainability practices to the operations of companies (Dow Jones Sustainability Index, 2013). According to Jamali & Mirshak (2007), some companies do not recognize issues such as workplace safety, corruption, tax fraud as corporate sustainability questions that need to be addressed. Formal corporate sustainability is utilized by large national and multinational corporations, and particularly those that have recognized global brands or have international status, as a growing number of investors are asking about corporate responsibility and sustainability (Colwell & Beckman, 2007; Saleh et al., 2011; Dow Jones Sustainability Index, 2013). These companies try to conform to global standards, but if the significance of context is large, then there will be a move away from standardized corporate sustainability practices for local branches or operations in line with local conditions (Halme et al., 2009).

Still, corporate sustainability adoption has been increasing in emerging markets. Between 2010 and 2012, the Total Sustainability Scores of companies in EMs increased 23%, confirming the trend towards long-term thinking and improved sustainable practices (Dow Jones Sustainability Index, 2013). This might be justified by the increasing awareness about sustainability and pressure for more sustainable practices. According to Baskin (2006), emerging economies have been facing biosphere pressures, which are associated with environmental sustainability; legitimacy pressures, which are associated with societal values; and market pressures, which are associated with the traditional business priority of maximizing value and returns. These pressures arrive, for instance, through the form of increasing costs, market-constraining regulation, NGO pressures, consumers' boycott of products, employee attitudes, and attraction of investors. The study of Perez-Batres et al. (2010) covering Latin American firms also found a positive result between companies' engagement with sustainability and institutional (normative and mimetic) pressures. However, this has happen in many senses, with countries evolving differently and diverse levels of sustainability registered. Scholars have referred that these differences are the result of the contextual pressures affecting emerging markets (Chambers et al., 2003, Gutierrez, 2004 in Baskin, 2006). For instance, Baskin (2006) in its study covering the BRICS (Brazil, Russia, India, China and South Africa) concluded that corporate sustainability is most likely to

be found in emerging markets where it is internally driven, with high levels of poverty/inequality, an active and informed civil society, companies with global aspirations, and the lack of autocratic political options for organized business. This is in line with the findings of Paine (2003), although not referring specifically to emerging markets, the author identified the following key conditions for the development of corporate sustainability: information is free-flowing; authority is decentralized and widely dispersed; members of the society have economic freedom; stakeholders are educated and well-informed about their choices of consumption, employment and investment; society expects companies to behave ethically, and has effective legal and regulatory systems to enforce basic ethical norms. Baskin (2006) summarized the current state of corporate sustainability in a number of emerging markets and its drivers:

Figure 3 - Existing trends and drivers in key emerging markets – by region

<i>Region</i>	<i>Current state of CR</i>	<i>Key drivers</i>
Central & Eastern Europe	<ul style="list-style-type: none"> Companies from Poland, Slovenia, Hungary and Czech show most evidence of incorporating CR approaches Pockets of interest in many other states Disclosure is increasing overall Russia, Bulgaria and Estonia show least interest 	<ul style="list-style-type: none"> Foreign ownership Accession (or the goal of accession) to EU membership Competitive advantage Influence of corporate governance codes
Africa & Middle East	<ul style="list-style-type: none"> South Africa has the most developed CR situation and SRI interest Minimal interest in CR elsewhere 	<ul style="list-style-type: none"> Domestic pressure for CR Threat of regulation Significant SRI market Influence of corporate governance code
Latin America	<ul style="list-style-type: none"> Most activity in Brazil, Mexico, Chile, Uruguay, Argentina Focus is on CSI/philanthropy Some SRI funds emerging 	<ul style="list-style-type: none"> Nascent public interest and domestic inequalities Regulatory pressures
Asia	<ul style="list-style-type: none"> Companies from India and Malaysia beginning to incorporate CR Pockets of interest elsewhere China has especially low take-up of CR 	<ul style="list-style-type: none"> Global pressures Strategy for competitive advantage Strong external investor interest in corporate governance and SRI in Asia

Source: Baskin, 2006, p.62

Although it has been implied before the increasing need that companies have to get involved with sustainability, and consequently communicate and report on their sustainability initiatives and results; we believe it is necessary to reinforce the importance of reporting initiatives, such as sustainability indices. Thus, in the next section, literature that supports sustainability reporting is reviewed.

3. Reporting on Sustainability and Sustainability Indices

Over the years, demand and pressures for more sustainability reporting have increased from both private and public organizations (Tsoutsoura, 2004; Murray et al., 2005; Ricart et al., 2005; Ioannou & Serafeim, 2011; Guziana, 2012). Financial markets, which power and importance have been growing, have demonstrated an increasing interest in non-financial matters and therefore are beginning to support social and environmental disclosure (Thielemann, 2000, Mackintosh et al., 2000 in Murray et al., 2005). Also governments have been increasing the requirements for disclosure of social and environmental data in corporate report (Murray et al., 2005). But a large part of companies have been disclosing this type of information voluntary, as the revelation of social and environmental data may impact on shareholders' decisions, as it has been mentioned before (Murray et al., 2005; Lin, 2009). In fact, evidence suggests that disclosure about sustainable activities has become a common practice for large companies in developed markets⁷ (KPMG, 2008 in Lin, 2009). Disclosure is frequently done through the corporate annual report (Mueller et al., 1994 in Murray et al., 2005) or as a stand-alone report (Lin, 2009; Jones et al, 2005, O'Dwyer & Owen, 2005 in Guziana, 2010).

Several authors have discussed the positive effects for companies from disclosure about their sustainable strategy (Bieker, 2002; Belkaoui, 1976, Frankle & Anderson, 1978, Jaggi & Freeman, 1992 in Murray et al., 2005; Guziana, 2010; Wagner, 2010). Disclosure can be used to promote the company's results and a channel of communication with stakeholders (Bieker, 2002). Positive results were found between advertising and providing feedback to interested stakeholders (about the sustainable performance) and the improvement of the company's financial performance (Murray et al., 2005; de Boer, 2003, Karl & Orwat, 1999, Riley, 2001 in Wagner, 2010). Advertising the company's results allows stakeholders, such as consumers, non-governmental groups or regulatory agencies, to achieve a certain level of knowledge about the company's sustainability-related activities. Moreover, if the company does not develop this element, positive effects may be reduced. Additionally, advertising can also become a means of differentiation (Shapiro, 1983, Fisman et al., 2008 in Wagner,

⁷ According to the Global Reporting Initiative (GRI), only 44 firms followed GRI guidelines to report sustainability information in 2000. By 2010, the number of organizations releasing sustainability reports, mostly on a voluntary basis, grew to 1,973 (Ioannou & Serafeim, 2011).

2010). Amongst the several benefits associated to communicating about the company's sustainable strategy are: recruitment of more innovative and motivated employees; enrichment of the company's reputation and brand; increasing sales; attraction of new investors (Turban & Greening, 1997 in Wagner, 2010)... These benefits were already mentioned before as benefits of the implementation of corporate sustainability; however, here they are mentioned in a more specific context.

Additional research has shown other positive effects linked to sustainability reporting. For instance, findings suggest that sustainability reporting brings transparency and change corporate behavior (Ioannou & Serafeim, 2011). Reporting can help the companies to change the way they conduct business, creating new competitive advantages that leads to higher economic value (Porter & Kramer, 2011 in Ioannou & Serafeim, 2011). Companies reporting on their sustainability strategy are also found to implement more ethical practices, contributing to decreasing levels of corruption (Ioannou & Serafeim, 2011).

Several initiatives have emerged to answer this increasing need for sustainability reporting some international, some national. Examples include GRI (Global Reporting Initiative), Greenhouse Gas Protocol, the Institution of Chemical Engineers' Sustainable Development Progress Metrics, the Green Environmental Management Initiative (GEMI) (Lenzen et al., 2004; Perrini & Tencati, 2006; Ioannou & Serafeim, 2011). These are tools for helping companies to provide both qualitative and quantitative information about their activities. However, the large number of schemes has generated some problems with multiplicity, complexity and the absence of a clear reference framework (Perrini & Tencati, 2006). Consequently, cases of fraudulent behavior, unfair communication and untrue results have been found (Perrini & Tencati, 2006). Some academics have considered the Global Reporting Initiative (GRI) as the best framework for voluntary reporting of environmental and social performance by businesses and other organizations worldwide (Szejnwald et al., 2009 in Guziana, 2010).

The increasing interest in sustainability disclosure has been also reflected by the growing number of external sources of reference (e.g. sustainability indices), which provide further insight into corporate sustainability performance (Lapinskiene, 2011; Searcy & Elkhawas, 2012 in Lourenço & Branco, 2013). Sustainability indices facilitate the exchange of information between the firms and stakeholders and play an important role in fostering the sustainable performance of firms. Examples of sustainability-

related indices are the already mentioned Dow Jones Sustainability Index, the FTSE4Good, and the Bovespa Corporate Sustainability Index (Lourenço & Branco, 2013). Sustainability indices help to disclose information; thus, to belong to sustainability indexes, firms are required to develop and reveal information that reflects the criteria adopted in matters of sustainability (López et al., 2007). Companies belonging to sustainability indices include a broad range of practices such as sustainability reporting, memberships in corporate sustainability organizations and networks, certification practices, as well as rankings of CSR performance along the triple bottom line (Gjolberg, 2009). Belonging to a sustainability index is a differentiating element (López et al., 2007), helping companies to fulfill the requirements for information disclosure on sustainability.

However, it is important to verify the relevancy (e.g. performance impacts) of belonging or not to a sustainability index. It is relevant to analyze if the market recognizes the company efforts to be included in a certain index. Relatively to the DJSI, as for other studies in the area which results are mixed, there are also studies that support and show a positive result while others show negative or no effect between the company results' while belonging to the index. López et al. (2007) study confirms that differences exist in various profitability measures obtained by DJSI firms with respect to DJGI (Dow Jones Global Index) ones. However, the study didn't find connection between the decisions on investments and financing and the sustainability policies reflected in the DJSI. In the timeframe analyzed, the authors found the link between the performance indicators and corporate sustainability to be negative. Ziegler (2011) found that the impacts of the inclusion in DJSI on alternative corporate financial performance are generally statistically insignificant for different groups of countries and sectors. For its turn, Cheung (2011) analyzed the impacts of inclusions and exclusions in DJSI on corporate sustainable firms in terms of stock return, risk and liquidity. He could not find any strong evidence that announcement (of inclusion or exclusion) per se has any significant impact on stock return and risk. However he found that the day of change, index inclusion (exclusion) stocks show a significant but temporary increase (decrease) in stock return. Cheung (2011) also analyzed similar studies (which examine the impact of index exclusions and inclusions from DJSI) and mentioned the following: Tsai (2007) found that there is a significant negative impact for index exclusion stocks, but no significant change for index inclusion stocks; Karlsson & Chakarova (2008) results showed that both index inclusions and exclusions do not generate significant abnormal

returns, even though they observed differences in market reactions when decomposing the sample across different markets⁸. For its turn, Cerin & Dobers (2001) found evidence that companies in the DJSI (Dow Jones Sustainability Global Index) outperform companies in the DJGI (Dow Jones Global Index)⁹. They also found several factors positively influencing the DJSI's sustainability performance: the DJSI focuses to a higher degree on the technology community than does the more generalized DJGI and the market capitalization value of corporations in the DJSI is two-and-a-half times larger than the corresponding average for the DJGI.

Regarding the reality in emerging markets, law is unable to provide social and environmental protection rather than in developed markets so companies may benefit from larger disclosure, as investors will have more information (Lin, 2009). Mixed results were found regarding whether reporting by companies in emerging markets is a growing trend as it has been found in developed countries. According to KPMG (2008 in Lin, 2009) disclosure generally remains a relatively rare practice in emerging markets, but it is growing. Analyzing the top 100 companies of several countries, they concluded the following: 60% of Brazil's top 100 companies published sustainability information in a separated report (e.g. sustainability report) or jointly with the annual report (e.g. as a section of the report) for the year between mid-2007 and mid-2008; compared with 17% of Mexico's top 100 companies; 42% of South Korea's; 42% of South Africa's; 26% of Hungary's; 23% of Romania's; and 14% of the Czech Republic's (KPMG, 2008 in Lin, 2009). Contrarily, Baskin's (2006), which analyzed corporate sustainability in BRICS (Brazil, Russia, India, China and South Africa), found that there is not a vast difference in sustainability reporting between leading companies in high-income OECD countries and their emerging market peers.

Although sustainability disclosure is growing in some emerging securities markets, empirical studies generally find that the quality of such disclosure suffers the following problems: a very limited amount of information; lack of comparability over years and between companies; unbalanced disclosure, with a greater emphasis on good rather than bad news; and a lack of third-party auditing to assure information credibility (Paul et al., 2006, Thompson & Zakaria, 2004, Zhang, 2007, Belal, 2008 in Lin, 2009).

⁸ The studies referred before were first mentioned by Cheung (2011).

⁹ The DJSI includes companies which showed to be market leaders in sustainability performance. The DJGI includes companies which are market leaders through the measurement of their market value (it does not include sustainability as criteria for the ranking).

According to the object of this study and our personal motivation, we have decided to concentrate on the Dow Jones Sustainability Index (DJSI) in emerging markets, to pursue with our analysis, investigating mainly the environmental performance of corporations. The DJSI is a privileged reference among sustainability indexes with a special focus on environmental performance and has developed recently a ranking dedicated to companies from emerging markets. The creation of the DJSI Emerging Markets is the top recognition of the growing number of companies from emerging markets linked to corporate performance and their good practices (at the same level than developed countries, which are frequently taken as reference).

3.1.Dow Jones Sustainability Index

The DJSI provides investors and companies with insight into the trends and events driving global supply and demand of sustainable products and services, bringing a greater appreciation of the benefits of integrating sustainability principles in both corporate and investment strategies.

The Dow Jones Sustainability World Index was launched in 1999 cooperatively by RobecoSAM Indices and S&P Dow Jones Indices, both well-known references for investors¹⁰. RobecoSAM selects the components, and jointly publishes and markets the DJSI with S&P Dow Jones Indices. S&P Dow Jones Indices is responsible for the index calculation and dissemination of the index data.

This index evaluates the stock performance of the world's leading companies in terms of economic, environmental and social criteria. Through the DJSI, investors can integrate sustainability considerations into their portfolios, and companies can benefit from being included in a platform for companies who want to adopt sustainable best practices (Dow Jones Sustainability Index (a), 2013). The Dow Jones Sustainability Index family comprises global, regional, and country benchmarks. Any company from any industry can be included in the index. RobecoSAM believes that the integration of sustainability criteria into traditional financial analysis helps to evaluate companies'

¹⁰ RobecoSAM's parent company is Dutch asset manager Robeco, which was established in 1929 and offers a broad range of investment products and services worldwide. RobecoSAM was founded in 1995. S&P Dow Jones Indices LLC, a part of McGraw Hill Financial, is the world's largest, global resource for index-based concepts, data and research. Home to iconic financial market indicators, such as the S&P 500® and the Dow Jones Industrial Average™, S&P Dow Jones Indices LLC has over 115 years of experience (Dow Jones Sustainability Index, 2013).

quality of management and future performance potential. RobecoSAM has always believed that financial analysis is incomplete if it ignores extra-financial factors. For instance, sustainability trends such as resource scarcity, climate change or an aging population continuously reshape a company's competitive environment and should be taken into consideration. Therefore, the inclusion of sustainability worries lead to better-informed decision as it may help to identify attractive investment opportunities that can generate long lasting value. RobecoSAM believes companies that overcome challenges through innovation, quality and productivity enhance their ability to generate long-term shareholder value.

DJSI uses a best-in-class approach, meaning companies that belong to the index fulfill certain clearly defined sustainability criteria better than the majority of their peers. Companies participate in the Corporate Sustainability Assessment (CSA) and receive a Total Sustainability Score between 0 – 100 and are ranked against other companies in their industry: only the top 10 % of companies from each industry, based on their sustainability score, are included in the DJSI. RobecoSAM also influences incremental improvements in companies' sustainability practices. To be included or remain in the index, companies have to continually intensify their sustainability initiatives. RobecoSAM believes this approach will benefit all stakeholders: investors, employees, customers and, ultimately, society and the environment.

CSA was developed to identify leading companies in the response to emerging sustainability opportunities and challenges presented by global and industry trends. It covers industry-specific criteria (risks and opportunities), as it is believed to play a key role in a company's long-term success, allowing comparison among competitors to identify the leaders. The CSA is designed to capture both general and industry-specific criteria covering the economic, environmental and social dimensions. The relative weights of the economic, environmental and social dimension of the questionnaire vary by industry (Figure I-1 - Annex 1). Information provided by companies is verified for accuracy by crosschecking companies' answers with other available information¹¹ and independent third party Deloitte conducts an external audit of the assessment process each year. At the end, using the Total Sustainability Score, RobecoSAM identifies companies for inclusion in the index.

¹¹ Other available information includes: the supporting documentation companies have provided, publicly available information, a company's track record on crisis management with media and stakeholder reports.

3.1.1. Dow Jones Sustainability Emerging Markets Index

Since its creation, RobecoSAM has included companies which act in emerging markets. The number of companies from these markets participating in the annual CSA and earning membership has increased over years, leading to the creation of the Dow Jones Sustainability Emerging Markets Index in 2013. Figure I-2 (Annex 1) shows how the number of companies from EMs listed in the index has grown from 5 in 1999 to over 25 in 2012. But only in February 2013, the Dow Jones Sustainability Emerging Markets Index was established to assess exclusively the largest companies with the best performance in terms of corporate sustainability in these regions (RobecoSAM & S&P Dow Jones, 2013).

Similar to what happens with all Dow Jones Sustainability Index, the DJSI Emerging Markets eligible universe is derived from the assessment of the 800 largest listed companies from twenty emerging markets¹² in terms of float adjusted capitalization in the S&P Global Broad Market Index (Figure I-3 – Annex 1). RobecoSAM uses also for this selection a best-in-class approach to ensure only 10% of top leading companies are included in the index. These companies are assessed by RobecoSAM using the annual Corporate Sustainability Assessment (CSA).

The DJSI Emerging Markets is reviewed annually and rebalanced quarterly to ensure that the index composition accurately represents the top 10% of the leading sustainable Emerging Markets companies in each of the RobecoSAM industries respectively.

The creation of the DJSI Emerging markets reflects the increasing importance of emerging markets and the good practices developed by companies in these countries. Despite the stereotypes created around companies in emerging markets, the increasing number of companies being included in the DJSI in the last years has shown that corporate sustainability is not a reality only in developed countries and restricted to large multinational companies.

Due to its recente creation, the DJSI EMs created an interest for the development of the presente investigation. In the following section a case study will be developed including several companies included in the DJSI Emerging Markets in 2013.

¹² Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Peru, the Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

4. Case study: Analysis of companies included in the DJSI Emerging markets

The objective of this study is to understand better how the sustainability strategy of companies in emerging markets is developed and implemented, as well as its relevancy for the whole company's strategy. In that sense, it analyzed the reality of the companies included in the Dow Jones Sustainability Index Emerging Markets in 2013. To collect the information needed, it was used both quantitative (questionnaires) and qualitative (interviews) methods. A descriptive analysis of the results and a statistical test of hypothesis were developed.

4.1.Universe and sample

To develop the proposed study, we decided to focus on the companies included in the Dow Jones Sustainability Index Emerging Markets in 2013. We needed to submit a request for more information regarding the companies in these conditions directly to the DJSI Academic Requests¹³. Once our request was accepted, we received the information that 81 companies were included in the DJSI Emerging Markets in 2013, making the study's universe¹⁴ (Table I-1 – Annex 1).

We invited the 81 companies, one by one, per email to participate in the study. In order to optimize our contacts and decrease the number of intermediaries in the process of exchanging information, we have looked for the target people (generally the responsible in the company for sustainability, or the media contact person to answer about sustainability-related questions) and contacted them directly. Their contacts details (e-mail) were obtained through public information available online and involved a long and thorough process of research that combined several sources (e.g. company's website, annual report, sustainability report). When it was not possible to identify a department or person directly linked to the work developed in the area of sustainability, more general contacts (e.g. media contact, general information request) were used. The target people of each company contacted by e-mail were invited to schedule a phone

¹³ RobecoSAM has a specific procedure to deal with Academic Request and requests should be sent through the following website: <http://www.sustainability-indices.com/academic-request.jsp>

¹⁴ The study universe is constituted by companies included in the DJSI Emerging Markets at 23rd September 2013. The list with the participants was shared with us in February 2014.

interview in order to provide more information about the project and the necessary steps for the successful exchange of information between both parts, if they accepted to participate in the study.

Table 2 - Positive and negative responses

Period	Number of invited companies	Number of positive responses	Percentage of positive responses	Number of negative responses	Percentage of negative responses
19 th May – 11 th August	81	12	15%	69	85%

From the 81 companies invited, only 12 companies accepted to participate in this study and give feedback about their sustainability strategies, either by answering the questionnaire or through an interview, or even both. This sample is built through a self-selection, once the companies themselves identified their desire to participate or not in the research (Saunders et al., 2009). Only data from those who accepted to participate was collected.

To drive conclusions about the population, it is extremely important to build a sample. However, in a research project like this, it is frequent to have low taxes of response (Saunders et al., 2009). The number of negatives responses and non-participation from companies in the study may cause several issues, including a biased sample. There were several reasons for companies do not participate in this study. According to Saunders et al. (2009), non-response can occur due to four factors:

- Refusal to respond without giving a reason;
- Ineligibility to respond because they do not meet the research requirements;
- Inability to locate respondent;
- Inability to make the contact despite the knowledge about the responder's location.

However, once we analyzed our results and the reasons why companies did not participate in this study, we concluded that the four conditions referred by the authors did not all match the situations we have found. Although there were some refusals to contribute to the research, companies justified their decision. Also all the contacted companies satisfied the requirements to participate in the study (inclusion in the DJSI Emerging markets). Moreover, in all companies it was possible to locate a contact detail. Thus, e-mails inviting for participation were sent to all the companies.

In the case of this particular study, we could split the negative answers in four categories:

- The company rejected the request;
- The company requested information, but it did not conclude the process;
- The company accepted the request, but it did not conclude the process;
- The company did not answer the request.

Some companies rejected the invitation to participate in this research, but their rejection was justified:

- The company claimed that it does not participate in surveys and academic projects due to logistics issues¹⁵, or the company only accepts to participate in a limited number of projects annually. At the date of our request, they had already reached that number;
- At the date of the contact, the company was not cooperating with the DJSI anymore and preferred not to participate, even if it was included in the index at the relevant moment (September 2013, last review at the moment of our information request to the DJSI Academic Requests)¹⁶;
- The company refused to participate because the information requested as part of the participation in the study is confidential and considered a source of competitive advantages for the company;
- The company is a holding company and it does not have the capacity to participate as the sustainability strategies are implemented by its subsidiaries independently.

Additionally, some companies showed interest in our project and requested inclusive more details about the research and its objectives, but did not give us more feedback. Other companies have accepted to participate in the project, but unfortunately it was not possible for several reasons (e.g. schedule's impossibilities; late response).

¹⁵ The reason mentioned was that it receives too many requests annually and it does not have capacity to answer all of them, choosing not to participate in any.

¹⁶ Quarterly reviews are done to the index, which originates new additions and deletions from the DJSI Emerging Markets. "Changes that result from the quarterly review are announced at least 1 week prior to the implementation date, which is on the third Friday in March, June, September, and December and become effective on the next trading day" (Dow Jones Sustainability Index (b), 2013, p. 19).

Finally, a largest number of companies did not answer to our requests, we never had any type feedback from them¹⁷.

The Table 3 summarizes the previous information and quantifies the number of cases founded.

Table 3 – Participants details

Invited companies	Companies accepted the request			Number of negative responses			
	Interview	Questionnaire	Both	Rejected the request	Requested information but did not concluded the process	Accepted the request but did not conclude the process	Did not answer the request
81	3	4	5	5	5	6	53
100%	4%	5%	6%	6%	6%	7%	65%
Total	12			69			
	15%			85%			

Over the months of working, since contacts have started to be made, we established several attempts to contact companies (by email) and managed to increase slightly the number of companies participating in our study. Despite continuing attempts, a large number of companies did not participate in this research (85% of our universe). Neuman (2005 in Saunders et al., 2009) suggests that an “active response rate” should be calculated using the following formula:

$$\text{Active response rate} = \frac{\text{Total number of responses}}{\text{Total number in sample} - (\text{ineligible} + \text{unreachable})}$$

Using this method, we have an “active response rate” equal to 15%. Neuman (2005 in Saunders et al., 2009) suggests response rates of between 10% and 50% for postal questionnaire surveys and up to 90% for face-to-face interviews. In our case, face-to-face interviews were not feasible, because we are dealing with companies spread all over the world, with long geographical distance. We have employed both questionnaires and (phone / Skype) interviews, achieving a 15% active response rate. Yet, in a study of this kind, involving large international companies, with such different activities and located in different continents, far from our workplace, the result was not surprising.

¹⁷ This last reason for the non-participation of companies could be included in the first situation pointed by Saunders et al. (2009): “Refusal to respond without giving a reason.” However, we consider Saunders et al. (2009) refer to explicit rejection to participate. In our case, we did not receive any feedback from companies and therefore, we cannot assume there was a refusal for participating in the study.

Still, in this case, we consider 15% of responses (12 companies) a very satisfactory rate¹⁸. Looking at these results, it is crucial to mention the limitations of the results obtained. Besides the low rate of response, the sample may also be biased in several ways (e.g. lack of control on the questionnaires' distribution, very different rates of participation amongst companies).

4.2.Methodology and collection of information

For the elaboration of this case study, we used more than one method to collect data and information about the sustainability strategies being implemented by the companies. We have collected, what we call, “quantitative” information through questionnaires, and “qualitative” information through interviews and company reports and webpages. The combination of multiple qualitative and/or quantitative methods and use of several sources of data is referred in the literature as triangulation (Saunders et al., 2009, Olsen, 2004). “Triangulation helps to ensure that the data are telling you what you think they are telling you” (Saunders et al., 2009, p.146). This might be particular relevant, due to the limitations of our sample size and particular characteristics (no control over the distribution of questionnaires).

The first tool used to collect primary data was an electronic questionnaire (Annex 3). Questionnaires were sent to companies, directly to our contact person in the company, by email to be distributed amongst the company's employees. It was intended that employees could access the questionnaires through an online platform. Advantages of this method include the collection of information in a predetermined order (deVaus, 2002 in Saunders et al., 2009). Therefore, the results obtained could be standardized, facilitating their analysis and comparison between variables (Saunders et al., 2009).

The main structure and some of the questions were based on the questionnaire from Ricart et al. (2005), which includes only open questions. However, in order maximize the number of answers and decrease the complexity of the questions, our questionnaire was prepared to include mainly closed questions. This method also helps to the treatment of the collected data. Still, we tried to expand responders' options by introducing the possibility of choosing multiple answers. We also included different type of variables: attribute variables to collect data about the respondents'

¹⁸ For instance, the study conducted by Ricart et al. (2005) covered 15 companies included in the DJSI in 2002.

characteristics; behavioral variables to collect data about the responders' and companies' actions relating to sustainability; and opinion variables to record how respondents feel and what they think about the corporate sustainability strategy developed by the company (Dillman 2007 in Saunders et al., 2009). The questionnaire's structure is presented in Table 4.

Table 4 - Questionnaire's Structure

Structure	
1	Biographical data
2	Sustainability Qualifications
3	Sustainability Awareness
4	Sustainability awareness within the company
5	Employee's Engagement
6	Company's Sustainability Structure
7	Sustainability Dialogue
8	Communication about company's values

Although questionnaires may be used as the only data collection method, it may be opportune to link them with other methods (Saunders et al., 2009). Thus, we also conducted semi-structured interviews with people in charge and employees working directly with sustainability issues. Semi-structured interviews are referred to as "qualitative research interviews" (King 2004 in Saunders et al., 2009) and the researcher (interviewer) has a list of themes and questions to be covered, although these may vary from interview to interview (Saunders et al., 2009). Hence, some questions may be omitted in some interviews or the order may be altered, depending on the flow of the conversation (Saunders et al., 2009). The Table 5 summarizes the structure followed during interviews¹⁹.

Table 5 - Interview's structure

Structure	
1	The relevancy of sustainability for the company
2	Definition of sustainability strategy
3	Internal assessment of results
4	External assessment of results
5	Context: Company from emerging market
6	DJSI Inclusion

¹⁹ The transcript followed during the interviews is available in Annex 4 – Interviews' questions.

Semi-structured interviews are most suitable in situations where the questions are either complex or open-ended, or the order and logic of questioning may need to be varied (Easterby-Smith et al. 2008, Jankowicz 2005 in Saunders et al., 2009). Interviews are better designed to comprehend “participants’ understanding of the phenomenon, its meaning to them, and what they consider relevant” (Dexter 1970, McCracken 1988 in Colwell & Beckman, 2007). Our case study falls in these situations, as it is our aim to explore the complex reality of corporate sustainability behind emerging markets and how companies regard that reality. We could not have feedback on how companies “see” the emerging markets reality and how it affects their sustainability strategies through the collection of quantitative data. Furthermore, according to Saunders et al. (2009) managers are more likely to agree to be interviewed, rather than to complete a questionnaire. In our contact with the companies, we could confirm this; several companies have accepted to answer questions during a phone conversation, but refused to answer the questionnaire. Amongst the reasons pointed, we can mention the following: questionnaires are time consuming for employees; administration of questionnaires would demand a long and bureaucratic process to be accepted by the internal management; it is not part of the company’s policies to share questionnaires from outsiders. Besides questionnaires and interviews, we also used public sources (e.g. company reports and websites) to collect secondary data and contrast it with the results from the questionnaires and interviews.

As already mentioned, we faced some data quality issues, since the sample is small and not representative of the universe. Thus, this sample is for various reasons biased. The quantitative data collected through the questionnaires may be biased; questionnaires were delivered through company members and we cannot guarantee there was not a selective process to collect the answers. For instance, some employees may not read in English. Also, the questionnaires answers came mainly from one company, biasing even more the sample.

Other issues may be related to validity and generalizability. In most of the cases, companies accepted to give feedback through the collection of one or two responses²⁰. Therefore, the conclusions driven from the data collected by the questionnaires cannot be generalized as the reality of corporate sustainability as seen by the employees of

²⁰ They did not have capacity to deliver the questionnaire massively amongst their staff.

companies included in the DJSI Emerging Markets. Also the findings from qualitative research are based on the use of a small and unrepresentative number of cases.

Nevertheless, given the absence of studies in this area, we consider that it was worthy to treat the information statistically, as present in the following sections. We hope that our work helps to give an overview about the sample studied and build a starting point for further studies.

4.3.Descriptive analysis of the results

In this section a descriptive analysis of the most relevant results of the questionnaire²¹ is developed. The responses collected are present in Annex 5.

The questionnaire was meant to be distributed amongst employees of companies listed in the Dow Jones Sustainability Emerging Markets²², through our contact person in the company. The objective of this questionnaire was to collect data that would allow us to drive conclusions about the engagement and knowledge level of the companies' employees with the corporate sustainability strategy being implemented at this moment by their employers. We find important to understand if employees participate in sustainable initiatives and feel involved with those initiatives. As mentioned before, employees are one of the most important stakeholders of companies, being a source of competitive advantages in the long-run (López et al., 2007; Bebbington, 2001; Sage, 1999). Nowadays, it is essential to guarantee that corporate sustainability is more than a bureaucratic process or a marketing strategy, in which some companies may even develop a *green washing* process. For the success of corporate sustainability, it is essential to implement a sustainable strategy and share this strategy within employees, involving them in sustainable initiatives. Companies that sincerely want to change corporate culture and improve social and environmental performance must show their individuals they are an integral part of their sustainability performance (Epstein & Roy, 2001). For instance, if the evaluation of employees' performance is based solely on short-term profit or revenue contributions, employees may boycott sustainable

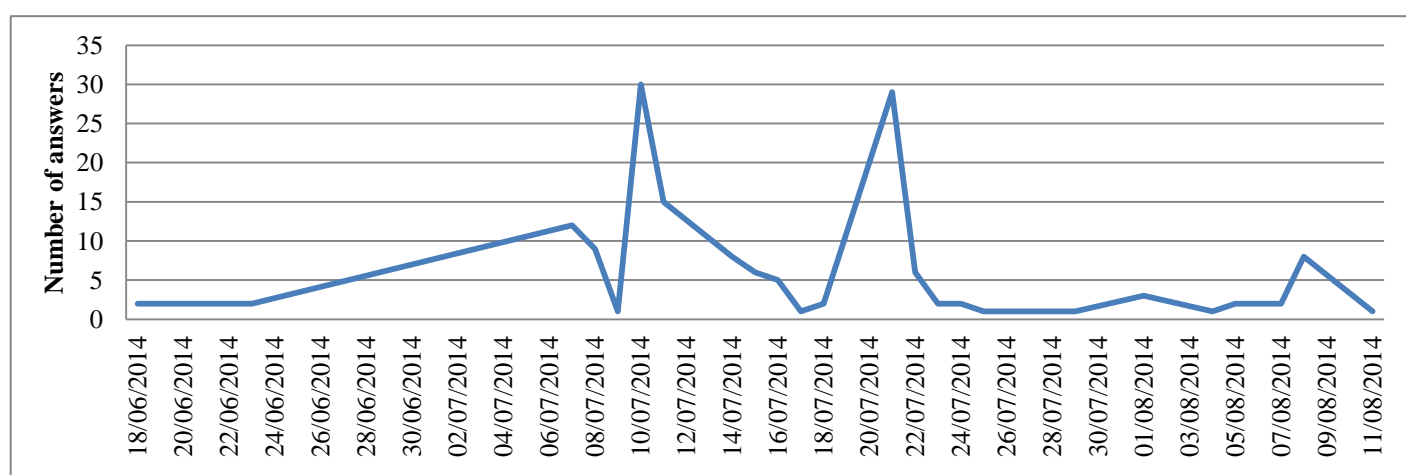
²¹ In several multiple-choice questions, it was possible to select more than one option and consequently a large number of combinations emerged. In this analysis we will refer only to the main conclusions and most relevant results. However in Annex 14, all detailed results are presented.

²² The questionnaire was distributed in English, Portuguese and Spanish. Companies warned us about the difficulties to distribute questionnaires in English, as a large number of employees would not be able to answer it.

initiatives as they recognize that trade-offs on the social and environmental issues are acceptable and the implementation of sustainability strategy becomes more difficult (Epstein & Roy, 2001). They are an important part for the success of the implementation of a sustainability strategy and therefore, the positive results associated (Saleh et al., 2011).

In total, 151 responses were collected between 18th June 2014 and 11th August 2014. The rate of responses was very irregular throughout the period with two main peaks. These peaks happened when the Company 2 shared the questionnaires with its employees the first time and again when a second request was sent. Other companies also received reinforced requests to share the questionnaire once again and to incentive employees to answer. However, the results were not as successful as in the case of Company 2. The distribution of the responses collection period is presented in Figure 4. Nine of the companies that accepted to participate in our study shared the questionnaire²³. Company 2 contributed to 77% of the responses. Participating companies' details are summarized in Table V-1 - Annex 5. Annex 5 includes all the tables and figures with the results found with our questionnaire. Until the end of the section 4.3, the tables mentioned are available in Annex 5 (except in the case of specific indication).

Figure 4 - Distribution of responses during the collection period



The section 1 of the questionnaire includes questions about biographical details of the responders. The results show that: 51% of the responders are 25-26 years old, 22% are 36-45 years old and 18% are 18-25 years old (Table V-3); a large part of the

²³ Companies' names have been encrypted (from 1 till 9).

responders has university studies, 49% have an under-graduation/ bachelor and 44% have a master degree (Table V-4); also 58% of employees perform an administrative position and 28% perform management positions (Table V-5). These results show our sample is constituted by a young population, highly educated and performing higher level positions. Moreover, we also questioned responders about their location (country), however as it could be possible to identify the companies with the information available, we decided to convert those results into continents. Most part of the respondents were in Latin America (80%) and North America (13%) (Table V-2).

Section 2 includes questions about the respondents' sustainability qualifications. Employees are questioned about their trainings in the sustainability area and how those trainings were achieved (related to their personal path or provided by the company/ employer). The results from the first question show that 32% of the responders had training on sustainability delivered by the company, while 19% said they had training either during their university studies and by the company and 16% said their only training was achieved during university studies (Table V-6). Answers to this question also showed that 12% of the responders did not have any training²⁴.

The next question's results show that 20% of the responders received information about sustainability initiatives formally and 19% only received that information informally; while 19% says that received information about sustainability practices both formal and informally. Only one responder said his employer did not provide her / him with information or training about sustainability (Table V-7). Regarding the main content of the information or training about sustainability provided by companies: 25% said they received information about general sustainability, the policies and practices being implemented by the company and the company's achievements in the sustainable area; and 15% said they received only specific information to the company's policies and practices. The results show that the largest part of the respondents has some knowledge about corporate sustainability and companies provided them with multiple types of information about the subject, either in a general context or directly related to the company's activities (Table V-8)²⁵.

²⁴ These results show us that the most part of respondents has training in sustainability issues provided by the company; this might be a bias of the sample. Some companies might have chosen target employees to answer the questionnaire.

²⁵ Lack of professional knowledge and skills may create resistance to corporate sustainability adoption (Colwell & Beckman, 2007).

Section 3 inquires about sustainability awareness, more specifically if the respondents know about the development and implementation of a corporate sustainability strategy by their employer. Not surprisingly, 94% of the responders said they know about this strategy (Table V-9). Due to the characteristics of our sample, it is not possible to generalize that the largest part of employees know about sustainability in companies, but this is still an incentive for further development of corporate sustainability. From here, the number of participants in the questionnaire were reduced to 142 (the number of responders who said they knew about the corporate sustainability strategy developed by the company).

In section 4, questions cover “Sustainability awareness within the company”. Employees were questioned about their knowledge regarding the sustainability measures being developed by the company. Our objective was also to understand what type of sustainability measures are implemented (environmental or / and social) and if sustainability measures are implemented internally or / and externally. According to the results, 15% of employees said their employers implement environmental measures internally that affect the core business, while 9% identified that the company develops, internally and externally, both environmental and social measures that affect and do not affect the core business (Table V-10). Thus, employees clearly identified mainly environmental measures being implemented by companies in all the possible cases (internally / externally, affecting and not affecting core business). This may be an indication that companies in this sample prioritize their environmental strategies, rather than their social strategies; or companies communicate more about this subject (e.g. it is easier to assess performance of environmental goals through quantitative methods, such as measurement of pollutant emissions, usage of water) and employees have more knowledge about environmental policies than social policies being implemented. Also the majority of the responders say their employers apply sustainability measures both internally and externally jointly. Some curious results were registered in this answer: 5% of employees said their companies develop external measures regarding natural issues in addition to internal measures, although they have not selected any of the internal measures option; also 3% of employees answered their companies developed internal options jointly with the option “Supports third parties causes (e.g. voluntary work, recycling) only. Sustainability is not promoted internally.” This last result may suggest that employees are confused and uncertain about the measures being implemented by the companies. Still in this section, 96% of the responders referred that

the principles of sustainability have been implemented into product and services development processes (Table V-11).

In section 5, it is analyzed the employees' engagement with the sustainability measures being implemented by the company. First, it is evaluated if employees feel involved with the sustainability measures being implemented and why (e.g. they feel they contribute for performance's improvement): 37% of employees said they are involved with sustainability measures even if their job is not directly affected; 27% of employees is involved and their job is related to sustainability; 11% of employees are not involved with the measures, even if they know about them (Table V-12). Then it was evaluated if employees feel their contribution, through the participation in sustainability measures, is important to the company's sustainable performance improvement: 32% of the employees feel that all jobs together contribute to sustainable performance improvements, while 22% of employees refers their own job is contributing; the remaining employees believe both jobs together and their own contribution are helping to achieve more sustainable results. Only 1% of employees believe their contribution is not relevant (Table V-13). When asked about their contribution in a general context of improving society and environment improvement, 54% of employees believe the company measures are contributing positively, 32% of employees believe their individual contribution is relevant for more positive results (Table V-14). About 2% believes their contribution is not relevant. These numbers show very positive results for corporate sustainability in these companies, not only the majority of employees are involved in the sustainability measures developed (even if their job does not require them to do it), but they also believe their contribution is relevant for company, society and environment improvement. Moreover, they also believe companies are making the difference with their strategies. Employees' positive vision of their company's sustainability strategy is extremely important for the improvement of sustainable strategy in the long run. Motivated employees about sustainability are less favorable to try to jeopardize the sustainable results in favor of short-term gains (Epstein & Roy, 2001).

In section 6, employees were evaluated about the "Company's Sustainability Structure", this is their knowledge about the existence of a sustainability board committee and its constitution and roles. Amongst responders, only 13% of employees said they did not know about the existence of a sustainability board committee. From the ones that said there is a sustainability board committee, 54% of employees believe

the committee is constituted by both executive and non-executive members, 27% of employees think the committee is constituted by executive members only, while 6% of employees believe the committee is constituted by non-executive members only (Table V-15). When inquired about the committee roles and responsibilities, the number of answers felt: 16% of the responders said they do not know what are the roles and responsibilities and 12% did not answer. About 22% of the responders believe the committee is the main responsible for the sustainability strategy: to plan the company sustainable strategy, to discuss how sustainable policies will be implemented, to assess results achieved by the company, and to ensure that stakeholders comply with the company corporate values (Table V-16). From the responders, 81% of employees said they do not participate in the committee meetings (Table V-17). Moreover, 43% of the responders said they do not know about the existence of an external advisory group that supports the company regarding its sustainability strategy, and 22% of the responders know that there is an external advisory group, but they are not able to identify it (e.g. auditing group, government) or their main responsibilities. The majority of the remaining responders (20%) believes companies' sustainable performance is evaluated for several external stakeholders (Table V-18). These results may indicate that employees know how the corporate sustainability structure works, even if they do not participate directly in the decision making process. Understanding the corporate sustainability structure may help employees to feel involved with the measures being implemented, as they are part of the process. Again, acceptance and engagement of employees may be decisive for the successful implementation of a sustainability strategy.

In sections 7 and 8, questions inquire about the sustainability dialogue and communication, which is, how companies communicate about their sustainable values and sustainability strategies with their employees and other external stakeholders, how is that communication established, and how frequent is this dialogue. Communication is an important part of getting stakeholders involved with sustainability because they can give essential feedback that may help companies to improve their performance. Additionally, if stakeholders do not know about the company's strategy, possible benefits associated with the sustainability strategy may be reduced. Research has shown that positive effects brought by the adoption of sustainability strategies are only reached if the company achieves a sufficiently high level of advertising (Wagner, 2010). Relevant stakeholders (consumers, non-governmental groups or regulatory agencies

among others) need to have a certain knowledge about the company sustainable activities. Benefits will be reflected particularly in improvements of brand image and reputation. If this complementary element is not developed, then the activities may have negative net benefits: without sufficient advertising, the cost for sustainability may exceed benefits (at least in the short-term).

Regarding the sustainability dialogue with employees, 37% of the responders said they discuss sustainability every month, while 21% of the responders said that this dialogue happens at least once a year (Table V-19). In all, 13% of the responders are not involved in the sustainability dialogue: 7% said there is not dialogue and 6% said they do not know how frequent the dialogue happens. When questioned about the means used to establish the sustainability dialogue, 28% of the responders said that meetings are organized for that end and 24% of the responders said there are specific moments of evaluation (Table V-20). Regarding communication about their sustainable values internally, the majority of the responders said there is formal communication (22%) and that communication also happens during recruitment (19%) (Table V-21). This last result is very encouraging, because recruiting the right people for the company, which share its values and vision, is fundamental for the successful integration of employees. Employees that engage with the company's values and share the same vision than their employers will be less likely to try to jeopardize the corporate sustainability strategy. Additionally, companies may reduce costs directly associated with recruitment, training and others.

About the external communication of the sustainable values, 30% of the responders identified that companies mostly promote their values publicly (e.g. marketing, advertising), as well as their achievements, adapting their message specifically to each type of stakeholder (e.g. clients, partners, suppliers...) (Table V-22). The adaptation of the communication strategy and communication style is critical to ensure that effective communication is achieved. For the success of the implementation of a sustainability strategy, companies should identify their stakeholders, as well as their needs (Zink, 2005). The adaptation of different communications styles is one of actions companies need to develop. Effective communication will help stakeholders to identify themselves with the company's values, recognize its positive results and reward it. Enormous benefits may emerge, for instance: facilitation achieving licenses from governments, attraction of green investors, attraction of new consumers, just to mention some. When questioned about the means used by companies to collect feedback internally, 33% of

the responders said that there is not a formal process, but employees can share their ideas while 15% of employees said there is an auditing process. Also 13% of the responders said that they do not know how their employers check the awareness and compliance level with sustainability corporate values internally (Table V-23). Companies could benefit from the implementation of more formal processes to collect employees' feedback. However, to achieve positive results, it would be crucial to ensure employees can share their opinions freely. An external auditing group may be the most convenient solution. Regarding how companies ensure that stakeholders embrace their sustainability values, 32% of the responders said they do not know, while 14% of the responders said their employers only use informal means (Table V-24). However, a formal verification could help companies by pointing specific areas that need improvement.

4.4. Statistical Hypothesis Test

To pursue with our analysis and reach more relevant statistical conclusions, a Test of Hypotheses using the Chi-Square (X^2) test will be done. The Chi-Square distribution involves using sample data to test for the independence of two variables (Anderson et al., 2011). To develop Test of Hypotheses, first it is made a tentative assumption about a population parameter, which is called the null hypothesis and is denoted by H_0 . Then an opposite hypothesis of what is stated in the null hypothesis is defined, called the alternative hypothesis. The alternative hypothesis is denoted by H_1 . The hypothesis testing procedure uses data from a sample to test the two competing statements indicated by H_0 and H_1 :

H_0 : The variable X is independent of the variable Y

H_1 : The variable X is not independent of the variable Y

To develop the hypothesis testing, the IBM SPSS Statistics 21.0 software was used. It was tested the relationship between several variables using the Chi-Square distribution using the p-value approach with a level of significance of 5% (α).

Variables' Aggregation

To be possible the Chi-Square independence test, it was necessary to create new variables. The Table 6 summarizes the new variables. It was also necessary to aggregate the information collected from the questionnaires. Otherwise due to the large number of possibilities driven from the responses it would not be possible to apply the Test of Hypotheses. In Annex 6, the new categories created from the variables' aggregation for each variable are summarized.

Table 6 – Aggregation of Variables

Question	Variable	Aggregation details
Age	Age	Table VI-1
Qualifications	Qualification	-
What is your job within the company?	Job	Table VI-2
Did you receive any training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?	Train	Table VI-3
Does your company provide (or provided in the past) any kind of information / training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?	Train_Comp	Table VI-4
What type of sustainability measures does your company develop?	Sust_Meas	Table VI-5
What is the main content of the training provided by your company?	Cont_Train	Table VI-6
Are you involved in the sustainability measures developed by your company?	Inv_Sust	Table VI-7
Do you believe your contribution is relevant for the company's sustainable improvements?	Cont_Imp	Table VI-8
Do you believe your contribution for the practices implemented by the company are contributing to the environment and society improvement?	Cont_Soc	Table VI-9
Do you know if your company has any board committee to deal with sustainability issues? (For instance, a Corporate Social Responsibility Committee.)	Board	Table VI-10
If yes, please could you tell us, the Corporate Social Responsibility Committee's main role and responsibilities	Board_Role	Table VI-11
Do you participate at board meetings where sustainability is discussed?	Board_Part	Table VI-12
How does this dialogue happen?	Dialogue_Sust	Table VI-13
How does your company promote its sustainability corporate values internally?	Comm_Values	Table VI-14
How does your company check the awareness and compliance level with sustainability corporate values internally?	Evaluation	Table VI-15

Chi-Square Tests

The tests conducted were divided in three groups according to the variables used and the main type of relationship that we tried to find.

Group 1: Sustainability Qualifications and Training

The statistical tests included in this group intend to drive conclusions about the biographic characteristics of the population and their levels of training on sustainability matters. Conclusions may help companies understand better the characteristics of their employees and verify if there is a need for more training.

Group 2: Employee Engagement

The statistical tests included in this group intend to drive conclusions about specific characteristics for employees' engagement with the company's sustainability strategy. Conclusions may help companies understand better if their employees feel engaged with the measures being implemented and why.

Group 3: Company's Sustainability Structure

The statistical tests included in this group intend to drive conclusions about the knowledge of the responders about the company's sustainability structure.

The results found in the Statistical Hypothesis Test are summarized in Table 7. All tests followed the same methodology, as specified here for "Test 1: Is the variable "Train" related to the variable "Age"?"

In this test, it was related the level of training of participants with their age in order to verify if there is a link between both. The crosstabulation of the variables is available in Table VII-1 (Annex 7).

The Chi-Square tests requires an expected frequency of five for each category (Table VII-2 in Annex 7). Thus, it is mandatory that less than 20% of the cells are in these conditions, otherwise the first assumption of the test is violated (Field, 2013). In this test, this assumption is violated (37.5%).

However, it is possible to verify the relationship between variables through the p-value calculated with the Chi-Square Likelihood Ratio. The Likelihood Ratio is an option that must be applied, for instance, with smaller samples when the Chi-Square is not available (Field, 2013). In this case, the Likelihood Ratio p-value is 0.01, which is lower than the level of significance ($\alpha = 5\%$), indicating there is a relationship between the variables. Therefore, the null hypothesis is rejected. The results suggest that younger employees had more trainings than older ones, either provided by the employer or during their personal path.

To verify how strong is the relationship between these variables, it was calculated the Cramer's V (Table VII-4 in Annex 7). The higher the Cramer's V number, the greater the strength of association:

- 0 - 0.30= no relationship to weak relationship
- 0.31 - 0.70= moderate relationship
- 0.71 - 1.0= strong relationship

For this test Cramer's V is 0.248, meaning although there is a relationship, it is weak.

Table 7 - Summary of the results of the Statistical Hypothesis Test

Group	Test	Variables	P-value	Cramer's V	Result
1	1	Train x Age	0.001	0.248	Variables are related
	2	Train x Qualification	0.011	0.255	Variables are related
	3	Tain x Job	0.092	-	Variables are not related
	4	Train_Comp x Age	0.193	-	Variables are not related
	5	Train_Comp x Qualification	0.93	-	Variables are not related
	6	Train_Comp x Job	0.534	-	Variables are not related
2	7	Inv_Sust x Age	0.001	0.3	Variables are related
	8	Inv_Sust x Qualifications	0.008	0.271	Variables are related
	9	Inv_Sust x Job	0.0005	0.262	Variables are related
	10	Train x Inv_Sust	0.13	-	Variables are not related
	11	Train_Comp x Inv_Sust	0.009	0.226	Variables are related
	12	Inv_Sust x Cont_Train	0.12	-	Variables are not related
	13	Inv_Sust x Sust_Meas	0.047	0.287	Variables are related
	14	Inv_Sust x Cont_Imp	0.13	-	Variables are not related
	15	Inv_Sust x Cont_Soc	0.024	0.241	Variables are related
	16	Cont_Imp x Cont_Soc	0.0005	0.336	Variables are related
	17	Inv_Sust x Dialogue_Sust	0.084	-	Variables are not related
	18	Inv_Sust x Comm_Values	0.628	-	Variables are not related
	19	Inv_Sust x Evaluation	0.729	-	Variables are not related
	20	Cont_Imp x Evaluation	0.004	0.463	Variables are related
	21	Cont_Soc x Evaluation	0.592	-	Variables are not related
3	22	Board x Board_Role	0.0005	0.463	Variables are related
	23	Board x Board_Part	0.74	-	Variables are not related
	24	Board x Job	0.0005	0.282	Variables are related
	25	Board_Part x Inv_Sust	0.073	-	Variables are not related

Through the analysis of the Hypothesis Tests' results and once several relationships were found (or not), we could have conclude:

Group 1

In this group, the relationship between the training in sustainability and the characteristics of employees were analyzed to verify if there is a pattern between employees which have more or less training in this field; as well as if companies prioritize sustainability training to different employees. As expected, these results show companies are not differentiating amongst their employees to provide them training. Moreover, it was found a relationship between age and training, and qualification and training. The sample is constituted mainly by young and high-qualified employees, which may indicate these populations are getting more involved in sustainability. But more research would be needed to verify this last conclusion.

Group 2

The results found in this group allow us to drive some conclusions about characteristics of employees engaging with the sustainability measures. First there is a relationship between employees' engagement and their age, qualification and job / positions. These results may indicate that employees' level of awareness about sustainability and the company's sustainability strategy is still not homogeneous amongst all employees. Then, it was also found a relationship between employees' engagement with the company's sustainability strategy and: the type of training provided by the company; the sustainability measures developed by the company; evaluation about awareness internally. These results might indicate that trainings about sustainability promoted by the company help to increase employees' engagement with corporate sustainability; as well as the implementation of internal measures, which employees apply every day in their daily tasks rather than external initiatives. Moreover, the existence of an evaluation process may also help to improve employees' awareness and engagement, as they can understand the company takes sustainability seriously and their performance has impacts in the company's results. And more the company cares about those impacts.

However, it was not possible to find a relationship between other variables that we could expect to be related to each other. For instance, it would be expected that employees with higher levels of training in sustainability matters would feel more

engaged with corporate sustainability; or that the internal communication about the subject would also affect positively employees' engagement.

Group 3

The results indicate that responders not only know about the existence of a sustainability-related board, as they can also identify their main responsibilities and tasks. However, the employees' knowledge about the board's existence does not imply their participation at the board meetings. Still, more qualified employees (our sample is constituted by high qualified employees) may have a deeper knowledge about the board's existence, according to test 24 results.

Finally, it was not found a relationship between employees' participation at the company's sustainability board and their engagement with sustainability, as it was expected, once just a minority of the responders participates at board's meetings.

Once again, we would like to highlight the limitations of these results. As we have emphasized before, unfortunately, our sample is small and is biased. Therefore, the results driven from these tests cannot be generalized as the reality of companies included in the DJSI Emerging Markets in 2013. Moreover, additional research would be needed to confirm the conclusions achieved in this study. Still, these results might help companies to understand better what variables affect their employees' awareness and engagement with their corporate strategy. They might also use the results as an indicator to identify points where they could improve.

5. Duratex

As focus of our case study we have chosen Duratex, the company which was most cooperative with this study (identified as Company 2 in the previous analysis). In total, 116 Duratex employees answered to our questionnaire, representing 77% of our sample; therefore, consisting in the more representative results in our sample, which is inevitably biased. In July 2014, at the time the questionnaire was conducted, Duratex had 10.886 employees, but only 3.263 had access to an email account and could have answered the questionnaire. To distribute the questionnaires, we have worked directly with the Corporate Sustainability Department. According to this department, 332 questionnaires were sent²⁶.

Additionally to the information collected with our questionnaires, we also conducted an interview with the Corporate Sustainability Department (Annex 8), which provided us valuable information about the company's sustainability strategy regarding the main points of our analysis. This was a semi-structured interview in which we tried to follow the structure previously presented and assess the main points there indicated, but the speakers could speak freely and conduct the flow of conversation as wished. Moreover, we also used public information provided by the company through its website (<http://www.duratex.com.br/>) and its sustainability dedicated website (<http://www.duratex.com.br/Sustentabilidade>); its Annual and Sustainability Report, as well as its Platform 2016 Report. In this section, we will conduct a descriptive analysis of the company's sustainability initiatives and how its corporate sustainability strategy is formulated, while comparing to the results obtained with our questionnaires to the company's employees, information provided by other companies²⁷ and more general conclusions presented in the bibliographic research.

²⁶ This number of target employees accounts for a response rate of 35%; although this sample accounts for 1% of the total employees and 4% of all employees that could have accessed the questionnaire online.

²⁷ We have also conducted interviews with other companies that provided us valuable information about their sustainability strategy. We will use now these informations to compare with Duratex strategy and the conclusions found in the bibliographic research.

5.1. Company's presentation

Duratex is a Brazilian company that manufactures wood panel, metal fittings and sanitary ware in the Latin America. The company was created in March 31, 1951. The company is a private-sector, publicly-traded Brazilian company with its control shared by the conglomerate Itausa - Investimentos Itaú and Companhia Ligna de Investimentos, which together with the respective controlling shareholders, hold 40 % and 20 % of the share capital. The company is headquartered in Sao Paulo, Brazil. Duratex concentrates its operations in Brazil but it has also a 80% stake in Tablemac, a Colombian wood panel producer. Additionally, Duratex also has subsidiaries in the United States (Duratex North America) and in Europe (Duratex Europe).

Duratex has several brands: Deca, Hydra, Durafloor and Duratex; and exports its products to more than 30 countries, and has a portfolio of more than 30,000 clients. According to the company, Duratex is one of the tenth largest in its operational sector, and the market leader in Brazil and the Southern Hemisphere in laminated flooring with the Durafloor brand, and in metal fittings and sanitary ware with the Deca and Hydra brands.

Duratex includes sustainability issues directly in its business model, both in its operations and in the communities where it is present. The company's sustainability strategy includes compliance to legislation, risk monitoring, environmental preservation and social responsibility. Sustainability is also seen as one of the company values.

5.2. The sustainability strategy

Definition of sustainability strategy

Duratex has been involved with sustainability questions for some years now, as part of Itausa Holdings, which managed the environmental strategy for the industrial arm of the group. But only in 2010, corporate sustainability has acquired a more formal shape and only in the second half of 2013 (July) it acquired the form it has today.

In 2010, it was created the Sustainability Committee with the objective to develop mechanisms for integrating sustainability into Duratex's management process. At this moment, it has started a process of diagnostic to assess the sustainability needs of the company. This process involved consultations with internal and external

stakeholder groups through the development of a Stakeholder Panel. Additionally, it was also created a Sustainability Commission²⁸, which was constituted by several managers and directors of the different areas of the company. In 2011, Duratex has redefined its Mission, Vision and Values, which include Sustainability.

In 2012, the company developed a second Stakeholder Panel, a Employees Panel, as well as interviews with top management, which included the feedback from senior management, employees, and experts and opinion leaders on various subjects, such as sustainability, capital markets, communication, third sector, the environment and corporate governance. This Panel included 22 professionals from senior management (including 17 managers and five members of the Board), 48 employees and 25 specialists. From here, it was developed the Platform 2016, which includes Duratex's objectives and proposed activities in the medium term (between 2013 and 2016).

As our literature research has shown, when defining a corporate sustainability strategy it is very important not to forget that the company is not an isolated institution, instead it is inserted in the society and impacts several groups of stakeholders (e.g. employees, suppliers, customers, etc.). Moreover, the company is also impacted by these stakeholders. The Stakeholder Theory (Wilson, 2003; Ricart et al., 2005; Salzmann et al., 2005; López et al., 2007; Saleh et al., 2011), which is one of the main supporters for corporate sustainability, argues that companies have responsibilities with their stakeholders and should help to improve their welfare. Consequently, the involvement of different stakeholders when defining a sustainability strategy is crucial for the company, because only with the feedback from its stakeholders (internal and external), it will be possible to define an appropriate and more effective strategy that satisfies their needs.

The "Platform Sustainability 2016" includes the guidelines and goals for Duratex's actions on sustainability issues up to 2016. The company prioritizes with this strategy the integration of environmental, cultural and economic aspects. Duratex Corporate Sustainability Strategy is based on three lines of action: Dialogue and Relations, Environmental Management and Performance, and Transparency and Responsibility in Business (Figure VIII-1 –Annex 8). This strategy includes the integration of sustainability into the day-to-day work practices of the business divisions,

²⁸ The Commission was extinguished in 2013, after the establishment of the sustainability platform.

and the incorporation of social and environmental issues in decision making. Furthermore, Duratex is also engaged to enhance its relationships with internal and external stakeholders and expand the dialogue with different groups. Duratex Sustainability goals are summarized in Figure VIII -2 – Annex 8.

It is believed that the incorporation of corporate sustainability by sustainable leaders must go behind “superficial” activities. Although external activities (e.g. donations) are noble and an important contribution; companies, which are sustainability leaders, should be incorporating sustainability deeper into their core business. Sustainability is not only about creating positive impact, but also about reducing negative impacts. While developing their activities, companies impact in several ways society and environment, sometimes originating adverse consequences. However, through a more sustainable strategy, companies can reduce the impact of their activities. This can only be achieved when sustainability is incorporated in processes, products and services. Duratex is an example in this matter. Its activities involve the use of natural resources (e.g. wood) and have several environmental impacts, which if they do not do anything to reduce, in the long term, may be catastrophic. Through its sustainability strategy, Duratex had compromised to develop greener processes of production and products in order to reduce their adverse impact (e.g. reduction of water consumption).

Another important point of our analysis is the existence of a corporate sustainability structure. Duratex governance structure for the sustainability strategic planning process consists of a Sustainability Director, a Sustainability Area, and the Sustainability Committee and Sub- Committee (Figure VIII-3). The Sustainability Committee is composed of Executive Board Directors, Board Members, including independent members, an external expert and representatives of the controlling shareholders. The CEO of the Executive Board and the Chairman of the Board are invited to attend all meetings. The main role of the Sustainability Committee is to encourage the development and implementation of systems to integrate sustainability issues into corporate strategy and management processes.

The existence of a formal structure to work with sustainability may serve as an indication of the importance of sustainability for the company and how deep sustainability is incorporated in the company’s strategy. As it happens with other business units, the development of corporate sustainability is demanding and therefore, for its correct implementation, it is necessary to establish a formal structure in the company that works side by side with the core business units. In this case, a formal

body with a high level of importance (reporting directly to the company's CEO) exists at the center of the formulation of the business strategy. Stakeholders, both internal and external, can find here a guarantee of the central role of sustainability in the company. Additionally, the results of questionnaires have shown employees generally know about the existence of the Corporate Sustainability Board and their role. For employees, understanding sustainability is a key part of the company's business, it is crucial to increase their engagement with this strategy, as they can see sustainability is a long-term commitment and they should not only focus on the short-term benefits. Also, companies can use this strength in future recruitments to attract new talents as new managers become more aware of the role of sustainability in business.

Initiatives developed

Duratex's "Platform Sustainability 2016" includes the development of both Social and Environmental policies. According to our personal motivations, the focus of our analysis is the environmental policy and the activities Duratex has been developing in this area.

Environment – Environmental Policy

Duratex Environmental Policy (Annex 8) specifies the company's positioning regarding environmental matters and the company's compromises in order to reduce its environmental impacts. Over the years, Duratex has developed several initiatives, such as:

- **Eco-Efficiency:** Preserving natural resources, materials recovery, effluent and residue treatment, forest management.
- **Emission Inventory:** Quantification of greenhouse gas emissions into the atmosphere, based on recognized methodologies and protocols.
- **Environmental Investments:** The company makes several investments in environmental protection (effluent treatment, residue destination, forest preservation, environmental actions, water treatment, exhaust systems, and environmental liability activities).
- **Environmental Indicators:** Most Duratex industrial and forestry units have indicators for energy and water consumption, wastewater generation, atmospheric emissions, residues.

- Biodiversity: Duratex carries out a number of biodiversity monitoring actions to find out more about, and verify the levels of diversity of flora and fauna in the forestry areas.

Processes and Products

Duratex sustainability strategy includes also the implementation of sustainable principles in its processes of production and products. Two different divisions constitute the company: Deca Division and Wood Division.

Deca Division has a range of resource-saving products with over 150 items, such as washbasins, urinals, flushing systems, showers and electronic faucets with timers, which enable saving water and energy.

Wood Division includes the company's plants. Duratex has 163,000 hectares of planted forests and deploys ongoing programs for identifying and monitoring local biodiversity. Duratex intends to develop efficient management of natural resources, continuous process improvement, and a strict policy of minimizing environmental impacts.

In addition to incorporate sustainability in its processes, sustainability leaders can also contribute for the creation of more sustainable products, reducing the impact created during the life cycle of their products. Environmental impacts are not only created during the manufacturing process, they occur also during the usage of the products and ultimately at the destruction of the products. More responsible companies can also put in place measures that help to reduce these impacts, such as recovering the products at the end of their life to give them a more sustainable end than consumers could do. Other innovations, such as the ones put in place by Duratex that help to decrease water consumption are also an example of how companies can position themselves to develop more sustainable products differentiating them from competition, while decreasing the negative impact of the usage of such products. Innovation is seen as a source of competitive advantages, using innovation in order to develop more sustainable products can help to develop competitive advantages even further. For instance, by developing more sustainable products companies can target a new type of consumers who are attracted by this type of products.

Internal communication channels

As argued before, employees are a very important group of stakeholders for companies; they are also considered as an important asset and a source of revenues and costs. Therefore, it is essential that while implementing a corporate sustainability strategy companies get their employees involved. According to literature, if employees do not engage with the sustainability strategy, they may boycott sustainability activities in order to maximize short-term results. This may occur for instance if employees feel their remuneration is based on short-term results, rather than long-term performance. Benefits driven from sustainability may take some time to emerge, although costs are felt immediately. Other possible costs associated with a bad management of human resources are related to recruitment and retention of talents. Employees must fit in with the company's culture, if sustainability is part of that culture, it is crucial to attract the right people. An effective communication of the sustainability strategy is a key element to get employees involved and attract the most qualified people.

Companies should communicate their sustainability values during recruitment processes and clarify their sustainability strategy and goals to employees. Companies should also implement measures to increase their employees' knowledge about sustainability, such as, trainings and seminars. By increasing their understanding of sustainability and what is being done, they can get more involved and appreciate the results obtained. Moreover, it is also important to communicate on sustainability achievements. To communicate about the company or their personal sustainable achievements is a good way to motivate them to continue and improve their performance.

Duratex has developed several channels to communicate with its employees:

- Duratex Ombudsman
- Code of Ethics
- This is Who We Are Program with our Mission, Vision and Values
- Bulletin Board, Intranet, slide shows on TV, videos, communication campaigns and celebration and recognition events
- Education and Training Programs
- Sustainability Portal, internal channel with information on the subject, polls, and space for comments

- Sustainability Newsletter - a monthly newsletter on sustainable practices at social, economic and environmental levels, and it is sent to the company stakeholders.

Employees had also the opportunity to participate in the development of the company's sustainability strategy. In 2012, Duratex organized a Personnel Panel to assess the perceptions related to employee management and contributed to the definition of Duratex's material issues. Besides, in 2014, a climate research was carried out for the first time with all the company's employees. Before only coordinators and managers would participate in this important tool for evaluation and dialogue with the company. The research was conducted by an external source to ensure responses were not biased and employees could express themselves freely. Duratex has also made sustainability one of the five axes of the variable remuneration of the Duratex's Executive Board. In 2014, Duratex extended the indicators for variable remuneration in sustainability to the entire management team, and will be measured as of 2014. Goals used in this process are developed according to the particularities of each department and business unit, composing several indicators for key matters in the company's sustainability. With this measure, Duratex said it wants to keep improving targets and expanding the number of employees involved.

External communication channels

As important as get employees involved and communicate them the company's sustainability strategy, it is the communication with external stakeholders. Literature has shown that positive effects from sustainability (e.g. brand recognition, attraction of sustainable consumers and investors) may be reduced if there is not an appropriate level of marketing and dissemination of the sustainability strategy. However, this channel should not be only one way. Instead the company should also be open to hear external stakeholders' demands regarding sustainability issues. They might help it to improve by pointing it sensitive issues.

While elaborating its sustainability strategy, Duratex has heard its external stakeholders through a Panel of Experts, which included opinions from 25 invited experts from different sectors such as sustainability, capital markets, communication, third sector, the environment, governance, etc. in order to discuss Duratex's critical

issues. Meanwhile, several other channels were created to communicate with suppliers, consumers, partners, amongst others.

To communicate with its suppliers, the Duratex Supplier Management Project (GFD) was set up to strengthen the relations with suppliers, define a structured management process, based on social, environmental, economic, quality and service level criteria. Suppliers and service providers are requested to comply with several criteria regarding good practices of sustainability, such as the prohibition of child labor and slave labor, and adoption of measures to protect the environment. Furthermore, Duratex has identified risky stakeholders (regarding sustainability issues) and it has worked directly with them in order to help them improving their practices and attain the sustainability levels required by Duratex. Annual meetings with suppliers are held to share knowledge and encourage the use of best practices. Other channels have also been put in place, such as the Duratex Ombudsman, where suppliers can leave their feedback about the company's sustainability strategy and other issues.

Duratex has created also channels to communicate with its consumers. With the support of the Marketing and Communication areas, Duratex promotes loyalty initiatives, such as promotion schemes, participation in events. Additionally, the company also commits to the continuous improvement of customer service, quality and differentiation of products and services. In its efforts for alignment with Platform 2016, one of the company's targets is to develop and implement dialogue mechanisms to promote the discussion of sustainability attributes and aspects.

Internal assessment of results

Another important part of defining a sustainability strategy is the definition of units of measurement of the sustainability measures implemented. To evaluate their sustainable performance, companies have to develop an assessment of their sustainability strategy results. For each measure implemented, it should be developed an assessment unit. Although it might be difficult to quantify the benefits from sustainability, some benefits, for instance benefits associated with reduction of materials consumptions or reduction of natural resources usage, are easy for companies to assess and have direct impact in cost reductions. Contrarily, intangible benefits, such as improvement of brand image or retention of talents, may only be verified in the long-term and companies cannot measure it. Still, measurement is essential to help the company to improve and track the performance of their sustainability measures.

Consequently, measurement also allows the company to communicate with its stakeholders about its positive results, as we demonstrated before. Communicating on its results may have several benefits, as the company can “talk” directly to several stakeholders, such as suppliers, investors, consumers... To communicate on its sustainable results, companies usually include a sustainability section in its Annual Report or have a dedicated Sustainability Report.

Duratex has highlighted that the new sustainability strategy, as it is known today and described in Platform 2016, is very recent (only one year in July 2014) and therefore, it was not yet possible to measure its impacts. The first results will only be assessed in February 2015, as teams are now conducting the process of analysis of results. However, the company has been tracking its sustainability performance for some years already. Duratex has implemented indicators for energy and water consumption, wastewater generation, atmospheric emissions and residues in its industrial and forestry units. Every month, teams at the plants and forest units prepare the quantitative environmental indicators using the SAP management system. Additionally, they are also monitored by the Sustainability area system. These indicators are consolidated annually and included in the company’s Annual and Sustainability Report in order to monitor the performance targets. Duratex Annual and Sustainability Report follows the Global Reporting Initiative (GRI), under the “Comprehensive” option, meeting the G4 directives since 2013.

External assessment of results

In order to ensure an unbiased assessment of the company’s sustainability performance, it is necessary to appeal to external sources that ensure the veracity of the company’s results. These external sources can take several forms, such as auditing companies, governmental bodies, stakeholders’ assessment... It may also be the assessment developed by independent sources, such as the Dow Jones Sustainability Index, which by assessing the company’s sustainability performance ensures that their strategies comply the highest demanded levels and industry leaders’ initiatives. These type of initiatives (e.g. index and independent rankings) are also seen as a seriously source of guidelines for improving the company’s current strategy. Stakeholders will find here a reliable source of information and indicator of the company’s results.

In the last two years, Duratex performance was audited by Price Waterhouse Coopers (PWC). Over the years, the company has also received several certifications

regarding its good performance in the environmental area: Duratex is certified ISO 14001 and FSC (Forest Stewardship Council), Duratex shares are included in the BM&FBovespa Corporate Sustainability Index, Duratex included the Dow Jones Sustainability Index Emerging Markets...

Context: Company from emerging market

One of our objectives with this study is to show that companies in emerging markets can have a sustainable performance as good as companies in developed markets; despite the stereotypes associated to emerging markets and the issues faced in these regions. An example of the increasing number of companies from emerging markets incorporating sustainability in their strategies and taking this question seriously, as well as their good practices, is the creation of the Dow Jones Emerging Markets. The Dow Jones Emerging Markets was created in 2013 due to the increasing number of companies from emerging markets being included in the DJSI World that justified the creation of an independent index. The DJSI Emerging Markets does not include only multinational companies, national companies may also be included; although they must be listed companies. This is an important point for us, as we would like to know how companies “purely” from emerging markets face the sustainability question.

Duratex, although it has an international positioning with international subsidiaries and customers, has the largest part of its activities in Brazil. We questioned the Corporate Sustainability Department about how they believe to be developing a sustainability strategy in an emerging company impacts this process (definition and development of the sustainability strategy). Although the answers are personal opinions rather than the company’s positioning, we believe it is relevant to hear the people facing the difficulties while working on the development of the sustainability strategy. Thus, Duratex positions as a company inserted in a community, rather than an isolated organization, and its activities reflect the surrounding environment. So, communities and local conditions influence the definition process of the sustainability strategy. Also, country specific conditions, such as in Brazil, the high tax burden, low level of confidence in public institutions, among others, constrain the company’s activities, including sustainability activities. For instance, while looking for public information, the needed information may not exist and the company needs to start from zero; while in a country with systems more developed, companies can just access the information.

We also talked with other companies which accepted to contribute to our study and questioned them about this issue. We obtained opposite responses, depending on the positioning of the company. Although all these companies position as international players and have activities overseas, some believe that to be present in an emerging market highly influences their sustainability strategy as they have a local approach. They are included in certain communities and their sustainability strategy reflects the needs of those local communities. Still, companies try to align their international strategies (i.e. amongst subsidiaries) and include general guidelines. Companies referred for instance that while developing their activities in emerging markets and developed markets, governmental demands were very different and they would have to implement deeper strategies regarding the same subjects in some places only.

Moreover, key issues approached were also very different, as in developed countries some issues are already well assessed, and others are not even a priority in emerging markets (e.g. education and social security may be well assessed in developed countries but not in emerging countries, therefore companies in emerging markets will have to worry about these issues and not companies from developed countries; however, in developed countries there is an increasing concern regarding noise pollution, but emerging markets do not even consider this problem, yet).

Nevertheless, some companies expressed a different position. They believe that as international companies, their assessment is based on international standards and therefore the region situation is not a determinant factor while defining their sustainability strategy.

While literature has shown that sustainability related theories are strongly influenced by developed countries approaches and concepts; it has also been showed a more local approach is needed, as local necessities are not the same. Also, the economic reality is not the same, emerging markets are facing strong growth, while developed countries economic growth has stagnated. Meanwhile, the adverse consequences originated by the excess and rapid exploration of resources have left their marks. There is a lack of literature and research covering emerging markets that could help companies to implement their sustainability strategies.

DJSI Inclusion

The last point of our analysis is how companies see their inclusion in the Dow Jones Sustainability Index and the impacts they could record or they expect to record in

the future. In this question, companies were very unanimous: the inclusion in the DJSI Emerging Markets is a major recognition of their good practices and the success of their sustainability strategy. The DJSI is seen as a major reference amongst sustainability index and investors, and the inclusion in the index is definitely a stamp of good quality. Regarding the impacts of the inclusion in the Index, companies mainly referred the increasing attention of investors and other stakeholders. Companies have gained more attention, as well as their strategies. An increasing number of interested groups contacted the companies regarding their sustainability strategies. Additionally, it was also possible to register some tangible effects. For instance, the day after the inclusion in the DJSI, companies noted an increase in the shares' value.

For Duratex, the inclusion in the Index is especially relevant because the company's strategy is very recent. This was the first year of implementation, after two years of diagnostic and formulation. Moreover, Duratex is the only Latin American company in the materials sector that is part of this index²⁹.

5.3.Duratex Statistical Hypothesis Test

Following the results obtained in the Hypothesis Test in section 4, which included the answers of all companies that make our sample, we have decided to verify if the results would be the same in tests including only the answers of Duratex employees. Once Duratex accounted for 77% of the questionnaire's responses, we believe the same relationships will be founded. We have decided to test only the variables that showed to be related in the previous test.

The results of the Hypothesis Test developed with the Duratex sample are summarized in Table 8³⁰.

²⁹ This classification corresponds to the index DJSI Emerging Markets on 23rd September 2013. The list of the companies included in the index and their classification was shared with us by RobecoSAM in February 2014. At the date of the submission of this dissertation (September 2014), Duratex was included in the DJSI Emerging Markets in the "FRP Paper & Forest Products" sector.

³⁰ The tables generated with IBM SPSS for the realization of the Hypothesis Test are available in Annex 8.

Table 8 - Summary of the results of the Duratex Statistical Hypothesis Test

Group	Test	Variables	P-value	Cramer's V	Result
1	1	Train x Age	0,003	0,254	Variables are related
	2	Train x Qualification	0,039	0,251	Variables are related
2	7	Inv_Sust x Age	0,006	0,309	Variables are related
	8	Inv_Sust x Qualifications	0,018	0,281	Variables are related
	9	Inv_Sust x Job	0,002	0,262	Variables are related
	11	Train_Comp x Inv_Sust	0,005	0,284	Variables are related
	13	Inv_Sust x Sust_Meas	0,026	0,331	Variables are related
	15	Inv_Sust x Cont_Soc	0,052	0,039	Variables are related
	16	Cont_Imp x Cont_Soc	0,0005	0,408	Variables are related
	20	Cont_Imp x Evaluation	0,008	0,343	Variables are related
3	22	Board x Board_Role	0,0005	0,522	Variables are related
	24	Board x Job	0,0005	0,294	Variables are related

As expected, the same relationships than before are found for the specific case of Duratex. Thus, relationships found indicate that the company does not discriminate between employees regarding communication and training in sustainability, as well as employees are informed and participate in the corporate sustainability strategy, independently of their position, age or qualifications.

Duratex may be able to use these results to improve its strategy regarding the involvement of employees with corporate sustainability.

6. Conclusion

For long time, sustainability has been discussed. But in the last century, this discussion has gained momentum, as more adverse effects have become visible (e.g. increasing levels of pollution, deforestation, usage of child workforce, etc.). Several of these negative consequences are strongly related to companies' main businesses, such as intensive manufacturing or exhaustive usage of natural resources. Consequently, it has emerged a strong debate on if companies should or not include sustainability worries in their strategies. Theories and arguments have emerged supporting both positions.

Despite arguments against, sustainability has been developed by companies either because legislation has obliged them, as pressures around this subject increase; or because corporations start to understand the advantages related to the adoption of more sustainable practices. Organizations have found several benefits from the adoption of corporate sustainability, such as attraction of green investors and consumers, reduction of costs (e.g. through reduction of water waste), brand image and reputation improvement.

As corporate sustainability has become more and more a reality amongst world leaders and the community has demanded the improvement of sustainable practices, it has also arisen the need to report and communicate on corporate sustainability initiatives. This need is also related to the fact that several corporations have developed the so-called "greenwashing." This consists in companies that would develop an image related to sustainability and claim the implementation of sustainable practices, instead of developing them for real. To answer to this increasing need for more assessment of companies' sustainable practices and more reliable communication on these issues, several reporting initiatives have developed, as well as rankings and indexes that reward leaders for their best practices.

In line with these developments, it was created the Dow Jones Sustainability Index (DJSI), which has become a reference amongst sustainability indexes. The DJSI promotes an assessment based on environmental, social and economic performance, selecting only the best 10% of all companies qualified for its evaluation. The strict processes of evaluation and severe policies (e.g. immediately exclusion from the index if irregularities are found) have contributed to turn the DJSI in a quality stamp for

companies involved with sustainability and a guarantee for investors looking to invest in more sustainable organizations.

Despite the increasing adoption of corporate sustainability around the world, emerging markets have been stereotyped for their depreciative practices regarding environment and social problems. Consequently, organizations in these markets have been excluded from sustainability assessments. However, the reality might be very different and a growing number of companies from emerging markets have been positioning increasingly as sustainable organizations. Some of these organizations are even market leaders in corporate sustainability. Since its creation, the DJSI has included in its ranking companies from emerging markets. Over the years, the number of companies from these markets has kept increasing, originating the creation of a dedicated index, the DJSI Emerging Markets in 2013.

This dissertation covers companies included in the DJSI Emerging Markets in 2013. The methodology used includes the combination of quantitative (i.e. questionnaires) and qualitative information (i.e. companies' public information about sustainability). The questionnaires covered companies' employees (a key stakeholder group for companies) and its main objective was to evaluate the employees' engagement with the company's sustainability strategy. Results have shown that employees recognize the company's sustainability strategy and they engage with that strategy. Moreover, employees recognize that sustainable measures are implemented internally and affect their work. A case study about Duratex, a Brazilian company that has showed to have an exemplar corporate sustainability strategy, was also developed.

Research covering emerging markets is scarce. Due to its recent creation, studies including companies listed in the DJSI Emerging Markets are not available³¹. Therefore, more research about this subject is needed to drive further conclusions. Besides, our sample presented several limitations and it was biased, conclusions here driven cannot be expanded to the general reality of companies included in the DJSI Emerging Markets. Further research would be needed to confirm the results found, as well as expand conclusions. It would also be interesting to look for different relationships and target other key stakeholders (e.g. investors, customers).

³¹ At the time of the elaboration of this dissertation, we could not find studies covering companies included in the DJSI Emerging Markets, specifically.

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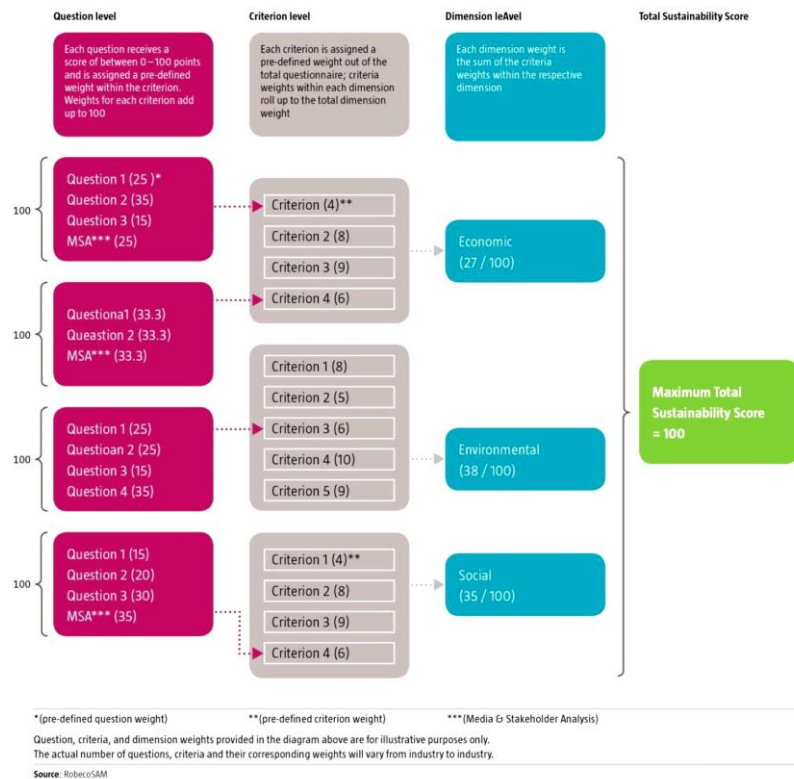
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8. Annexes

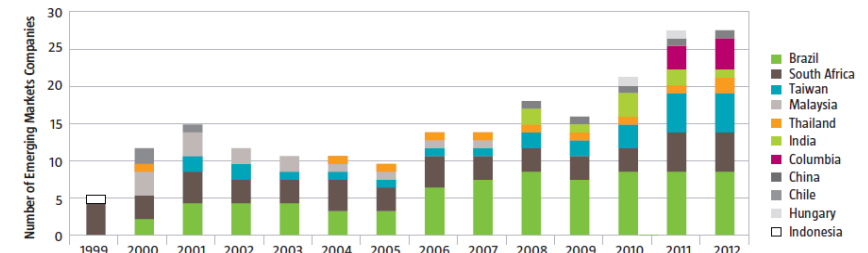
Annex 1 – Dow Jones Sustainability Index

Figure I-1 -Structure of the RobecoSAM Corporate Sustainability Assessment



Source: Dow Jones Sustainability Index, 2013

Figure I-2 - Representation of Emerging Market Companies in the DJSI World Since Launch



Source: Dow Jones Sustainability Index, 2013

Figure I-3- DJSI Emerging Markets– Selection



Source: Dow Jones Sustainability Index, 2013

Dow Jones Sustainability Index – A Case Study on Emerging Markets - 2014

Table I-1 - Dow Jones Sustainability Emerging Markets Index

Dow Jones Sustainability Emerging Markets Index				
African Bank Investments Ltd	Cementos Argos SA	Empresa de Energia de Bogota SA	Latam Airlines Group SA	Siam Cement PCL
Almacenes Exito SA	Centrais Eletricas Brasileiras SA	Empresas ICA SAB de CV	Lite-On Technology Corp	Sime Darby Bhd
Anadolu Efes Biracilik Ve Malt Sanayii AS	China Mobile Ltd	Exxaro Resources Ltd	Lojas Renner SA	SP Setia Bhd
Anglo American Platinum Ltd	China Overseas Land & Investment Ltd	Fibria Celulose SA	Mahindra & Mahindra Financial Services Ltd	Standard Bank Group Ltd
AngloGold Ashanti Ltd	China State Construction International Holdings Ltd	Gold Fields Ltd	Mahindra & Mahindra Ltd	Taiwan Mobile Co Ltd
Aspen Pharmacare Holdings Ltd	China Steel Corp	Growthpoint Properties Ltd	Malayan Banking Bhd	Taiwan Semiconductor Manufacturing Co Ltd
AU Optronics Corp	China Vanke Co Ltd	Grupo Aeroportuario del Sureste SAB de CV	Maruti Suzuki India Ltd	Tata Steel Ltd
Ayala Land Inc	Chunghwa Telecom Co Ltd	Grupo de Inversiones Suramericana SA	Mediclinic International Ltd	Thai Oil PCL
Banco Bradesco SA	Cia Energetica de Minas Gerais	Grupo Nutresa SA	Nedbank Group Ltd	United Microelectronics Corp
Banco do Brasil SA	Coca-Cola Femsa SAB de CV	Imperial Holdings Ltd	Nestle Malaysia Bhd	Vale SA
Bancolombia SA	CPFL Energia SA	Industrial & Commercial Bank of China Ltd	Oi SA	Wal-Mart de Mexico SAB de CV
Barclays Africa Group Ltd	Dabur India Ltd	Investec Ltd	Petroleo Brasileiro SA	Wipro Ltd
Barloworld Ltd	Delta Electronics Inc	Isagen SA ESP	Pick n Pay Stores Ltd	Woolworths Holdings Ltd
Braskem SA	Dr Reddy's Laboratories Ltd	Itau Unibanco Holding SA	PTT Global Chemical PCL	
BRF SA	Duratex SA	Itausa - Investimentos Itau SA	PTT PCL	
Bumi Armada Bhd	Ecopetrol SA	ITC Ltd	Sanlam Ltd	

Annex 2 – Email inviting to participate in the study

Dear {Name},

My name is Silvana Pintão, I am student in the Master in Management developed jointly by Faculty of Economics of the University of Porto (Portugal), and Kedge Business School (previous Euromed Management, in France).

The main subject of my master dissertation is to study the effects of the implementation of sustainability policies in a company's strategy and their impacts in the company's results. It is also our objective to try to establish a relationship between the success of such measures and the recognition of the good practices by international organizations, such as the Dow Jones Sustainability Index (DJSI).

My intention is to develop **a case study about your company**, which has shown an exceptional performance in the sustainability initiatives promoted and was recognized by the inclusion in the Dow Jones Sustainability Index.

I already contacted the DJSI Academic Requests and obtained from them the information that your company was included in the index for the year 2013, recognizing the valuable work your company has been developing.

To pursue with my study, I would like to schedule a phone interview with the some members of your personnel to have a quick conversation on the matter. I would like to know more about how your sustainability policies are developed.

I kindly request you to inform me as soon as possible about your availability in cooperating in this project.

I would like to thank you in advance for your collaboration.

Kind regards,
Silvana Pintão

E-mail: silvanapintao@gmail.com
silvana.pintao@kedgebs.com

Mob: +33781216096
+351963433777

Annex 3 – Questionnaire

Inclusion in the Dow Jones Sustainability Index Emerging Markets (2013)

This questionnaire is part of the "The Dow Jones Sustainability Index – A Case Study on Emerging Markets" research project included in the Master in Management program developed jointly by Faculty of Economics of the University of Porto (Portugal), and Kedge Business School (previously Euromed Management, in France).

It is very important for us to know your opinion. Please answer this questionnaire about the sustainability strategy being developed by your employer.

Some questions of this questionnaire are based on the questionnaire "The Sustainable Enterprise: Learning from DJSI Leaders" by Joan Enric Ricart et al., Fundación BBVA, 200

Section 1 ^{*} Required

Please choose your company: ^{*}

In which country are you located? ^{*}

Age ^{*}

- ☐ 18-25
☐ 26-35
☐ 36-45
☐ 46-60
☐ +60

Qualifications ^{*}

- ☐ Secondary / Middle School
☐ Undergraduated / Bachelor Degree
☐ Master Degree
☐ PhD
☐ Other:

What is your job within the company? ^{*}

- ☐ Top-management
☐ Management
☐ Administrative

- ☐ Non-administrative
☐ Other:

Section 2: Sustainability Qualifications

Sustainable development

Sustainable development (SD) is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (...). Thus the goals of economic and social development must be defined in terms of sustainability in all countries - developed or developing(...). (WCED, 1987, p. 37)

Corporate Social Responsibility (CSR)

CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. (Ashridge (2005, p.3) in Baskin J. , (2006)) Stakeholders include all the people, groups or organizations that have interest or concern in an organization (e.g. supplier, consumer, partner, employee...).

Did you receive any training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)? *

(You may choose more than one.)

- ☐ University studies
☐ Training promoted by your company
☐ By your own initiative (Please specify what kind of training you have received)
☐ No, I didn't receive any training
☐ Other:

Does your company provide (or provided in the past) any kind of information / training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?

(You may choose more than one.)

- ☐ Seminars for all the employees of the company are/ were provided.
☐ Seminars exclusive for management employees are/ were provided.
☐ Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.
☐ Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.

- ☐ No, my company doesn't promote these trainings.
☐ Other:

What is the main content of the training provided by your company?

(You may choose more than one.)

- ☐ Theoretical information about sustainability and CSR in a general context.
☐ General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...).
☐ Policies and practices (specific to the company activities) that should be adopted by the company and its employees.
☐ Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).
☐ Other:

Section 3: Sustainability Awareness

Corporate Sustainability Definition

Corporate Sustainability is a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments. (RobecoSAM and S&P Dow Jones, 2013)

Sustentabilidade Corporativa é uma abordagem empresarial que cria valor no longo prazo para as diferentes partes interessadas na empresa, aproveitando as oportunidades e gerindo os riscos provenientes dos desenvolvimentos económico, ambiental e social. (RobecoSAM and S&P Dow Jones, 2013)

Do you know if your company develops sustainability measures? *

- ☐ Yes
☐ No (If you don't know about the sustainability measures being developed by your company, please finish your questionnaire here. Thank you for your collaboration.)

Section 4: Sustainability awareness within the company

What type of sustainability measures does your company develop? *

(You may choose more than one.)

- ☐ Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business.
- ☐ Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business.
- ☐ Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business.
- ☐ Social responsible measures are promoted internally (e.g. labor rights) but do not affect the company's core business.
- ☐ Support external causes regarding social issues (e.g. abandoned children), in addition to internal policies.
- ☐ Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.
- ☐ Supports third parties causes (e.g. voluntary work, recycling) only. Sustainability is not promoted internally.

Have the principles of sustainable development been implemented into product and services development processes? *

- ☐ Yes
- ☐ No

Can you give us an example of one of the company's projects?

Section 5: Employee Engagement

Are you involved in the sustainability measures developed by your company? *

- ☐ Yes, my daily job includes sustainability subjects that influence my work.
- ☐ Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption).

- ☐ Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues).
- ☐ No, even if I know about the sustainability measures, my work doesn't reflect them.
- ☐ No, I know about the measures, but I don't get personal involved.
- ☐ No, I don't agree with the measures developed.
- ☐ Other:

Do you believe your contribution is relevant for the company's sustainable improvements? *

- ☐ Yes, I believe my job is important for more sustainable results.
- ☐ Yes, I believe my work is determinant for the company results, including regarding sustainability.
- ☐ Yes, all jobs (together) contribute to a more sustainable result.
- ☐ No, I don't believe my contribution is relevant.

Do you believe your contribution for the practices implemented by the company are contributing to the environment and society improvement? *

- ☐ Yes, because I believe the company's measures contribute to a better society and environment.
- ☐ Yes, because I believe my personal contribution helps to build a better society and environment.
- ☐ No, I don't believe my contribution is relevant.
- ☐ Other:

Section 6: Company's Sustainability Structure

Do you know if your company has any board committee to deal with sustainability issues? (For instance, a Corporate Social Responsibility Committee.) *

- ☐ Yes, constituted by only executive members.
- ☐ Yes, constituted by only non-executive members.
- ☐ Yes, constituted by non-executive and executive members.
- ☐ No, there is no board committee to deal with sustainability.
- ☐ I don't know whether there is a board committee or not.

If yes, please could you tell us, the Corporate Social Responsibility Committee's main role and responsibilities

(You may choose more than one.)

- ☐ To plan the company sustainable strategy.
- ☐ To discuss how sustainable policies will be implemented.
- ☐ To assess results achieved by the company.
- ☐ To ensure that stakeholders comply with the company corporate values.
- ☐ I don't know.
- ☐ Other:

Do you participate at board meetings where sustainability is discussed? *

- ☐ Yes, every time there is a meeting.
- ☐ Yes, at least to half of the meetings.
- ☐ Yes, at least at one meeting per year.
- ☐ No, I don't participate.

Do you know if company has any external advisory group that advises on sustainable development issues? *

- ☐ Yes, an auditing group.
- ☐ Yes, different stakeholders evaluate the company's results (e.g. some stakeholders ask you to comply with their policies and disclose information about the company's practices).
- ☐ No, there is not external assessment.
- ☐ I don't know.
- ☐ Other:

Section 7: Sustainability Dialogue

How frequently do managers and employees discuss sustainable development issues? *

- ☐ Never
- ☐ Every month
- ☐ Every quarter
- ☐ Every semester
- ☐ At least once a year
- ☐ Other:

How does this dialogue happen?

(You may choose more than one.)

- ☐ The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate).
- ☐ Meetings are organized between the sustainability board and employees.
- ☐ There are specific moments of evaluation of sustainability practices (e.g. questionnaires).
- ☐ Other:

Section 8: Communication about company's values

How does your company promote its sustainability corporate values internally? *

(You may choose more than one.)

- ☐ Corporate values are communicated during recruitment process.
- ☐ Employees receive formal training (e.g. seminars, conferences, etc.).
- ☐ Informal communication (e.g. co-workers share between them the different ideas of the corporate values).
- ☐ I don't know.
- ☐ Other:

How does your company promote externally its sustainability corporate values? *

(You may choose more than one.)

- ☐ The company frequently promotes its values publicly (e.g. marketing, advertising).
- ☐ The company promotes its achievements (e.g. inclusion in the Dow Jones Sustainability Index).
- ☐ The company adapts its message specifically to each type of stakeholder (e.g. clients, partners, suppliers...).
- ☐ I don't know.
- ☐ Other:

How does your company check the awareness and compliance level with sustainability corporate values internally? *

(You may choose more than one.)

- ☐ Employees are assessed about their knowledge of these values.
- ☐ Employees are rewarded for their practices.

- ☐ The company promotes internal/ external auditing to verify compliance.
- ☐ There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.
- ☐ I don't know.
- ☐ Other:

How does your company make sure that other parties in its supply chain embrace its sustainability values? *

(You may choose more than one.)

- ☐ Verification is informal, the company only confirms that stakeholders understand its values.
- ☐ The company requires its stakeholders to share with them relevant information about its sustainable practices (e.g. sustainability reports).
- ☐ The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed).
- ☐ I don't know
- ☐ Other:

The end

Thank you for your collaboration!

Suggestions

Did you find any problem while answering this questionnaire? Please help us to improve and write down any comments you may have about the questionnaire.

Annex 4 – Interviews’ questions

1 – The relevancy of sustainability for the company

- When has the company started to develop a more sustainable strategy?
- How did emerge this need?

2 – Definition of sustainability strategy

- How does the company define its sustainability policies and strategy?
- How is that process (definition of the sustainability strategy) developed?
- Who are the people involved in the process (only top-management or other employees also get involved)?

3 – Initiatives developed

- What type of initiatives does the company develop (internal and / or external)?

4 – Internal communication channels

- How is the sustainability strategy communicated to the employees?
- What are the communication channels used?

5 – External communication channels

- How is the sustainability strategy communicated to external stakeholders?
- How does the company ensure external stakeholders (e.g. suppliers, partners) comply with its sustainability policies?
- What are the consequences if external stakeholders do not comply with the company’s sustainability policies?

6 – Internal assessment of results

- How does the company evaluate the results resulting from sustainability policies?
- Can the company measure these results? How?

7- External assessment of results

- Does the company have an external source to evaluate sustainable performance?
- What is that source?
- How frequent is the assessment developed?

8 – Context: Company from emerging market

- How does belonging to an emerging market influence the company sustainability strategy? (If it does, of course.)

9 – DJSI Inclusion

- What is the importance (for the company) of belonging to the DJSI?
- Did something change since the inclusion in the Index? What?
- Does the company measure the impacts of belonging to the DJSI? How?

Annex 5 – Questionnaire Results

Table V-1– Distribution of the responses by participants

Companies	Sector	Number of responses	Percentage
Company 1	Materials	2	1%
Company 2	Materials	116	77%
Company 3	Capital Goods	18	12%
Company 4	Materials	2	1%
Company 5	Food, Beverage & Tobacco	3	2%
Company 6	Diversified Financials	1	1%
Company 7	Automobiles & Components	6	4%
Company 8	Telecommunication Services	1	1%
Company 9	Materials	2	1%
Total employees answering to the questionnaire	-	151	100%

Table V-2 – Localization of responders

Continent	Number of responses	Percentage
Latin America	121	80%
North America	19	13%
Asia	9	6%
Africa	2	1%
Total	151	100%

Table V-3 - Age of responders

Age	Number of responses	Percentage
18-25	27	18%
26-35	77	51%
36-45	33	22%
46-60	12	8%
+ 60	2	1%
Total	151	100%

Table V-4 – Qualifications of responders

Qualification	Number of responses	Percentage
Secondary / Middle School	3	2%
Undergraduated / Bachelor Degree	74	49%
Master Degree	66	44%
Other	8	5%
Total	151	100%

Table V-5 – Job of responders

Job	Number of responses	Percentage
Top-management	5	3%
Management	42	28%
Administrative	87	58%
Non-administrative	3	2%
Other	14	9%
Total	151	100%

Table V-6 – Did you receive any training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?

Type of training	Number of responses	Percentage
Training promoted by your company	48	32%
University studies + Training promoted by your company	29	19%
University studies	24	16%
No, I didn't receive any training	18	12%
University studies + Training promoted by your company + By your own initiative	13	9%
By your own initiative	8	5%
University studies + By your own initiative	4	3%
Other	4	3%
Training promoted by your company + By your own initiative	3	2%
Total	151	100%

Table V-7- Does your company provide (or provided in the past) any kind of information / training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?

Type of information provided	Number of responses	Percentage
Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.	30	20%
Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	29	19%
Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	28	19%
Seminars for all the employees of the company are/ were provided.	16	11%
Seminars for all the employees of the company are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.	10	7%
Seminars exclusive for management employees are/ were provided.	5	3%
Seminars exclusive for management employees are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.	5	3%
Seminars for all the employees of the company are/ were provided. + Seminars exclusive for management employees are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.	5	3%
Seminars for all the employees of the company are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	5	3%
Seminars for all the employees of the company are/ were provided. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	4	3%
Other	3	2%
Seminars exclusive for management employees are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	2	1%
Seminars for all the employees of the company are/ were provided. + Seminars exclusive for management employees are/ were provided. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	2	1%
Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.	2	1%
Seminars exclusive for management employees are/ were provided. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	1	1%
Seminars for all the employees of the company are/ were provided. + Seminars exclusive for management employees are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	1	1%
Seminars for all the employees of the company are/ were provided. + Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	1	1%
Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees. + Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees.	1	1%
No, my company does not promote these trainings.	1	1%
Total	151	100%

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Table V-8 - What is the main content of the training provided by your company?

Type of information provided	Number of responses	Percentage
Theoretical information about sustainability and CSR in a general context. + General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption + racism awareness...). + Policies and practices (specific to the company activities) that should be adopted by the company and its employees. + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	38	25%
Policies and practices (specific to the company activities) that should be adopted by the company and its employees.	23	15%
General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Policies and practices (specific to the company activities) that should be adopted by the company and its employees. + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	21	14%
Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	11	7%
General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...).	11	7%
Policies and practices (specific to the company activities) that should be adopted by the company and its employees. + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	10	7%
General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Policies and practices (specific to the company activities) that should be adopted by the company and its employees.	8	5%
Theoretical information about sustainability and CSR in a general context.	7	5%
General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	6	4%
Theoretical information about sustainability and CSR in a general context. + General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...).	4	3%
Theoretical information about sustainability and CSR in a general context. + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	3	2%
Theoretical information about sustainability and CSR in a general context. + Policies and practices (specific to the company activities) that should be adopted by the company and its employees. + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	3	2%
Theoretical information about sustainability and CSR in a general context. + General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).	2	1%
General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Other	2	1%
Theoretical information about sustainability and CSR in a general context. + General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Policies and practices (specific to the company activities) that should be adopted by the company and its employees.	1	1%
Theoretical information about sustainability and CSR in a general context. + General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...). + Policies and practices (specific to the company activities) that should be adopted by the company and its employees. + Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index). + Other	1	1%
Total	151	100%

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Table V-9 – Do you know if your company develops sustainability measures?

Knowledge about the implementation of sustainability measures	Number of responses	Percentage
No	9	6%
Yes	142	94%
Total	151	100%

Table V-10 - What type of sustainability measures does your company develop?³²

Type of measures developed	Number of responses	Percentage
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business.	22	15%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business. + Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business. + Social responsible measures are promoted internally (e.g. labor rights) but do not affect the company's core business. + Support external causes regarding social issues (e.g. abandoned children), in addition to internal policies. + Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.	13	9%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business. + Support external causes regarding social issues (e.g. abandoned children), in addition to internal policies. + Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.	7	5%
Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business.	7	5%
Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.	6	4%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business. + Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business. + Social responsible measures are promoted internally (e.g. labor rights) but do not affect the company's core business. + Support external causes regarding social issues (e.g. abandoned children), in addition to internal policies. + Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies. + Supports third parties causes (e.g. voluntary work, recycling) only. Sustainability is not promoted internally.	5	4%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business. + Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.	5	4%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.	5	4%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business. + Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business. + Social responsible measures are promoted internally (e.g. labor rights) but do not affect the company's core business.	4	3%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business.	4	3%
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business. + Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business. + Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.	4	3%
Other combinations*	60	42%
Total	142	100%

³² * Other combinations – To answer this question, it was possible to select more than one answer combining the options available.

The large number of options jointly with the freedom to choose more than one option originated a great number of answers (52 different combinations), which only one person pointed out. Although the objective of these tables is to be exhaustive and illustrate the largest number of possibilities recognized by the companies' employees, it does not justify including here all the responses.

Table V-11 - Have the principles of sustainable development been implemented into product and services development processes?

Knowledge about the implementation of sustainability into product and services	Number of responses	Percentage
No	6	4%
Yes	136	96%
Total	142	100%

Table V-12 – Are you involved in the sustainability measures developed by your company?

Involvement with the sustainability measures	Number of responses	Percentage
Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption).	52	37%
Yes, my daily job includes sustainability subjects that influence my work.	38	27%
Yes, my daily job includes sustainability subjects that influence my work. + Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues).	11	8%
Yes, my daily job includes sustainability subjects that influence my work. + Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption). + Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues).	10	7%
Yes, my daily job includes sustainability subjects that influence my work. + Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption).	9	6%
No, even if I know about the sustainability measures, my work does not reflect them.	8	6%
No, I know about the measures, but I do not get personal involved.	6	4%
Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption). + Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues).	4	3%
No, even if I know about the sustainability measures, my work does not reflect them. + No, I know about the measures, but I do not get personal involved.	1	1%
Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues).	1	1%
Yes, my daily job includes sustainability subjects that influence my work. + No, even if I know about the sustainability measures, my work does not reflect them.	1	1%
Yes, my daily job includes sustainability subjects that influence my work. + Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption). + Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues). + No, even if I know about the sustainability measures, my work does not reflect them. + No, I know about the measures, but I do not get personal involved. + No, I do not agree with the measures developed.	1	1%
Total	142	100%

Table V-13 – Do you believe your contribution is relevant for the company's sustainable improvements?

Contribution for company's improvements	Number of responses	Percentage
Yes, all jobs (together) contribute to a more sustainable result.	45	32%
Yes, I believe my job is important for more sustainable results.	31	22%
Yes, I believe my work is determinant for the company results, including regarding sustainability.	22	15%
Yes, I believe my job is important for more sustainable results. + Yes, I believe my work is determinant for the company results, including regarding sustainability. + Yes, all jobs (together) contribute to a more sustainable result.	21	15%
Yes, I believe my work is determinant for the company results, including regarding sustainability. + Yes, all jobs (together) contribute to a more sustainable result.	13	9%
Yes, I believe my job is important for more sustainable results. + Yes, all jobs (together) contribute to a more sustainable result.	4	3%
Yes, I believe my job is important for more sustainable results. + Yes, I believe my work is determinant for the company results, including regarding sustainability.	4	3%
No, I do not believe my contribution is relevant.	2	1%
Total	142	100%

Table V-14 – Do you believe your contribution for the practices implemented by the company are contributing to the environment and society improvement?

Contribution to the environment and society improvement improvements	Number of responses	Percentage
Yes, because I believe the company's measures contribute to a better society and environment.	77	54%
Yes, because I believe the company's measures contribute to a better society and environment. + Yes, because I believe my personal contribution helps to build a better society and environment.	45	32%
Yes, because I believe my personal contribution helps to build a better society and environment.	15	11%
No, I do not believe my contribution is relevant.	3	2%
Other	1	1%
Yes, because I believe the company's measures contribute to a better society and environment. + Other	1	1%
Total	142	100%

Table V-15 – Do you know if your company has any board committee to deal with sustainability issues? (For instance, a Corporate Social Responsibility Committee.)

Knowledge about board committee existence	Number of responses	Percentage
Yes, constituted by non-executive and executive members.	76	54%
Yes, constituted by only executive members.	38	27%
I do not know whether there is a board committee or not.	18	13%
Yes, constituted by only non-executive members.	9	6%
No, there is no board committee to deal with sustainability.	1	1%
Total	142	100%

Table V-16 – If yes, please could you tell us, the Corporate Social Responsibility Committee's main role and responsibilities

Type of information provided	Number of responses	Percentage
To plan the company sustainable strategy. + To discuss how sustainable policies will be implemented. + To assess results achieved by the company. + To ensure that stakeholders comply with the company corporate values.	31	22%
I do not know.	23	16%
Did not answer	17	12%
To plan the company sustainable strategy. + To discuss how sustainable policies will be implemented. + To assess results achieved by the company.	12	8%
To plan the company sustainable strategy. + To discuss how sustainable policies will be implemented.	10	7%
Other	8	6%
To ensure that stakeholders comply with the company corporate values.	8	6%
To plan the company sustainable strategy.	8	6%
To assess results achieved by the company.	3	2%
To discuss how sustainable policies will be implemented.	3	2%
To discuss how sustainable policies will be implemented. + To assess results achieved by the company.	3	2%
To assess results achieved by the company. + To ensure that stakeholders comply with the company corporate values.	2	1%
To discuss how sustainable policies will be implemented. + To assess results achieved by the company. To ensure that stakeholders comply with the company corporate values.	2	1%
To discuss how sustainable policies will be implemented. + To ensure that stakeholders comply with the company corporate values.	2	1%
To plan the company sustainable strategy. + To assess results achieved by the company.	2	1%
To plan the company sustainable strategy. + To assess results achieved by the company. + To ensure that stakeholders comply with the company corporate values.	2	1%
To plan the company sustainable strategy. + To ensure that stakeholders comply with the company corporate values.	2	1%
To ensure that stakeholders comply with the company corporate values. + Other.	1	1%
To plan the company sustainable strategy. + To discuss how sustainable policies will be implemented. + To assess results achieved by the company. + Other.	1	1%
To plan the company sustainable strategy. + To discuss how sustainable policies will be implemented. + To assess results achieved by the company. + To ensure that stakeholders comply with the company corporate values. + Other.	1	1%
To plan the company sustainable strategy. + To discuss how sustainable policies will be implemented. + To ensure that stakeholders comply with the company corporate values.	1	1%
Total	142	100%

Table V-17 – Do you participate at board meetings where sustainability is discussed?

Participation at the board meetings	Number of responses	Percentage
No, I do not participate.	115	81%
Yes, at least at one meeting per year.	9	6%
Yes, every time there is a meeting.	8	6%
Yes, at least to half of the meetings.	7	5%
Did not answer	3	2%
Total	142	100%

Table V-18 –Do you know if company has any external advisory group that advises on sustainable development issues?

Knowledge about the existence of an external advisor group	Number of responses	Percentage
I do not know.	61	43%
Yes, an auditing group.	31	22%
Yes, different stakeholders evaluate the company's results (e.g. some stakeholders ask you to comply with their policies and disclose information about the company's practices).	29	20%
Yes, an auditing group. + Yes, different stakeholders evaluate the company's results (e.g. some stakeholders ask you to comply with their policies and disclose information about the company's practices).	12	8%
No, there is not external assessment.	4	3%
Other	3	2%
Yes, an auditing group. + Other	1	1%
Yes, an auditing group. + Yes, different stakeholders evaluate the company's results (e.g. some stakeholders ask you to comply with their policies and disclose information about the company's practices). + Other	1	1%
Total	151	100%

Table V-19 – How frequently do managers and employees discuss sustainable development issues?

Frequency of the discussion between employees and managers about SD issues	Number of responses	Percentage
Every month	52	37%
At least once a year	30	21%
Every quarter	18	13%
Every semester	13	9%
Other	11	8%
Never	10	7%
I do not know.	8	6%
Total	142	100%

Table V-20 – How does this dialogue happen?

Means used in the dialogue about sustainability	Number of responses	Percentage
Meetings are organized between the sustainability board and employees.	40	28%
There are specific moments of evaluation of sustainability practices (e.g. questionnaires).	34	24%
Did not answer	17	12%
Other	16	11%
The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate).	10	7%
The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate). + Meetings are organized between the sustainability board and employees. + There are specific moments of evaluation of sustainability practices (e.g. questionnaires).	8	6%
Meetings are organized between the sustainability board and employees. + There are specific moments of evaluation of sustainability practices (e.g. questionnaires).	6	4%
The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate). + Meetings are organized between the sustainability board and employees.	6	4%
The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate). + There are specific moments of evaluation of sustainability practices (e.g. questionnaires).	4	3%
The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate)., Other	1	1%
Total	142	100%

Table V-21 – How does your company promote its sustainability corporate values internally?

Means to promote sustainability corporate values internally	Number of responses	Percentage
Employees receive formal training (e.g. seminars, conferences, etc.).	31	22%
Corporate values are communicated during recruitment process.	27	19%
Corporate values are communicated during recruitment process. + Employees receive formal training (e.g. seminars, conferences, etc.).	27	19%
Corporate values are communicated during recruitment process. + Employees receive formal training (e.g. seminars, conferences, etc.). + Informal communication (e.g. co-workers share between them the different ideas of the corporate values).	22	15%
Corporate values are communicated during recruitment process. + Informal communication (e.g. co-workers share between them the different ideas of the corporate values).	13	9%
Employees receive formal training (e.g. seminars, conferences, etc.). + Informal communication (e.g. co-workers share between them the different ideas of the corporate values).	4	3%
Informal communication (e.g. co-workers share between them the different ideas of the corporate values).	4	3%
Corporate values are communicated during recruitment process. + Employees receive formal training (e.g. seminars, conferences, etc.). + Other	3	2%
I do not know.	3	2%
Other	3	2%
Corporate values are communicated during recruitment process. + Other	2	1%
Employees receive formal training (e.g. seminars, conferences, etc.). + Other	2	1%
Corporate values are communicated during recruitment process. + Employees receive formal training (e.g. seminars, conferences, etc.). + Informal communication (e.g. co-workers share between them the different ideas of the corporate values). +Other	1	1%
Total	142	100%

Table V-22 – How does your company promote externally its sustainability corporate values?

Means to promote sustainability corporate values externally	Number of responses	Percentage
The company frequently promotes its values publicly (e.g. marketing, advertising). + The company promotes its achievements (e.g. inclusion in the Dow Jones Sustainability Index). + The company adapts its message specifically to each type of stakeholder (e.g. clients, partners, suppliers...).	43	30%
The company frequently promotes its values publicly (e.g. marketing, advertising). + The company promotes its achievements (e.g. inclusion in the Dow Jones Sustainability Index).	29	20%
The company promotes its achievements (e.g. inclusion in the Dow Jones Sustainability Index).	23	16%
The company frequently promotes its values publicly (e.g. marketing, advertising).	13	9%
The company promotes its achievements (e.g. inclusion in the Dow Jones Sustainability Index). + The company adapts its message specifically to each type of stakeholder (e.g. clients, partners, suppliers...).	13	9%
The company adapts its message specifically to each type of stakeholder (e.g. clients, partners, suppliers...).	8	6%
Other	5	4%
I do not know.	4	3%
The company frequently promotes its values publicly (e.g. marketing, advertising). + The company adapts its message specifically to each type of stakeholder (e.g. clients, partners, suppliers...).	3	2%
The company frequently promotes its values publicly (e.g. marketing, advertising). + The company promotes its achievements (e.g. inclusion in the Dow Jones Sustainability Index)., Other	1	1%
Total	142	100%

Table V-23 – How does your company check the awareness and compliance level with sustainability corporate values internally?

Means to check awareness and compliance internally	Number of responses	Percentage
There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.	47	33%
The company promotes internal/ external auditing to verify compliance.	22	15%
I do not know.	18	13%
Employees are rewarded for their practices. + The company promotes internal/ external auditing to verify compliance.	11	8%
Employees are assessed about their knowledge of these values. + The company promotes internal/ external auditing to verify compliance.	8	6%
Other	8	6%
Employees are rewarded for their practices.	6	4%
Employees are assessed about their knowledge of these values.	5	4%
Employees are assessed about their knowledge of these values. + Employees are rewarded for their practices.	5	4%
Employees are assessed about their knowledge of these values. + Employees are rewarded for their practices. + The company promotes internal/ external auditing to verify compliance.	5	4%
Employees are assessed about their knowledge of these values. + Employees are rewarded for their practices. + The company promotes internal/ external auditing to verify compliance. + There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.	2	1%
Employees are rewarded for their practices. + The company promotes internal/ external auditing to verify compliance. + There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.	1	1%
Employees are rewarded for their practices. + There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.	1	1%
The company promotes internal/ external auditing to verify compliance. + I do not know.	1	1%
The company promotes internal/ external auditing to verify compliance. + There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.	1	1%
There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time. + Other	1	1%
Total	142	100%

Table V-24 – How does your company make sure that other parties in its supply chain embrace its sustainability values?

Means to check compliance externally	Number of responses	Percentage
I do not know.	46	32%
Verification is informal, the company only confirms that stakeholders understand its values.	20	14%
The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed).	17	12%
The company requires its stakeholders to share with them relevant information about its sustainable practices (e.g. sustainability reports).	16	11%
The company requires its stakeholders to share with them relevant information about its sustainable practices (e.g. sustainability reports). + The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed).	14	10%
Other	12	8%
Verification is informal, the company only confirms that stakeholders understand its values. + The company requires its stakeholders to share with them relevant information about its sustainable practices (e.g. sustainability reports). + The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed).	6	4%
Verification is informal, the company only confirms that stakeholders understand its values. + The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed).	4	3%
Verification is informal, the company only confirms that stakeholders understand its values. + The company requires its stakeholders to share with them relevant information about its sustainable practices (e.g. sustainability reports).	4	3%
The company requires its stakeholders to share with them relevant information about its sustainable practices (e.g. sustainability reports). + The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed). + Other	1	1%
Verification is informal, the company only confirms that stakeholders understand its values. + I do not know.	1	1%
Verification is informal, the company only confirms that stakeholders understand its values. + The company requires its stakeholders to comply with minimum standards according to its values (e.g. promoting auditing activities to verify the standards followed). + Other	1	1%
Total	142	100%

Annex 6 – Variables’ aggregation

Table VI-1 – Age

Age	Number of responses	Percentage	Age*	Number of responses	Percentage
18-25	27	18%	18-25	27	18%
26-35	77	51%	26-35	77	51%
36-45	33	22%	36-45	33	22%
46-60	12	8%	+ 46	14	9%
+ 60	2	1%			
Total	151	100%	Total	151	100%

This table illustrates how the different variables were aggregated: “46-60” and “+ 60”. The two categories originated a new one “+46”.

Table VI-2 – What is your job within the company?

Job	Number of responses	Percentage	Job *	Number of responses	Percentage
Top-management	5	3%	Management	47	31%
Management	42	28%			
Administrative	87	58%	Non-management	90	60%
Non-administrative	3	2%			
Other	14	9%	Other	14	9%
Total	151	100%	Total	151	100%

This table illustrates how the different variables were aggregated: “Top-management” and “Management”; and “Administrative” and “Non-administrative.” In the first case a new category was created entitled “Management”, while in the second case a new category emerged as “Non-Management.”

Table VI-3 - Did you receive any training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?

Training	Training *	Number of responses	Percentage
University studies	Training promoted by the employee	36	24%
By your own initiative			
Training promoted by your company	Training promoted by the employer	48	32%
No, I didn't receive any training	No, I didn't receive any training	18	12%
Other	Other*	4	3%
Total		151	100%

This table illustrates how the different variables were aggregated: “University studies” and “By your own initiative” were aggregated as “Training promoted by the employee”, once both categories refer to trainings that the employees did out of the company environment. Every time one of these options was selected alone or combined were “Training promoted by the employee”. The similar happened to “Training promoted by your company” that was renamed as “Training promoted by your company”, because the training acquired result from the company initiatives. Answers from employees that chose both alternatives were aggregate under the name “Both”. The “No, I didn't receive any training” remained without any change.

Table VI-4 - Does your company provide (or provided in the past) any kind of information / training in Sustainable Development (SD) and/ or Corporate Social Responsibility (CSR)?

Training	Training *	Number of responses		Percentage	
Seminars for all the employees of the company are/ were provided.	Formally	72		48%	
Seminars exclusive for management employees are/ were provided.					
Some information about sustainable policies and behaviors to be adopted is/ was formally divulged / distributed among the employees.	Informally	29	46	19%	30%
Sustainable policies instructions and CSR practices information are/ were informally communicated to the employees					
No, my company does not promote these trainings. + Other	Other*	4		3%	
Total		151		100%	

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: “Seminars for all the employees of the company are/ were provided.” and “Seminars exclusive for management employees are/ were provided.” were defined as a formal type of training and therefore aggregated as “Formally”. Every time one of these options was selected alone or combined were “transformed” into “Formally”. The similar happened to “informal” type of training. Answers from employees that chose both alternatives (one formal and one informal) were aggregate under the name “Both”.

Table VI-5 - What type of sustainability measures does your company develop?

Measures	Measures *	Number of responses		Percentage	
Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business.	Measures are applied internally	48	70	32%	46%
Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business.					
Social responsible measures are incorporated in the company's strategy (e.g. topmanagement opportunities are offered to both women and men) and affect the company's core business.					
Social responsible measures are promoted internally (e.g. labor rights) but do not affect the company's core business.					
Support external causes regarding social issues (e.g. abandoned children), in addition to internal policies.	Measures are applied externally	1		1%	
Support external causes regarding natural issues (e.g. biodiversity), in addition to internal policies.					
Supports third parties causes (e.g. voluntary work, recycling) only. Sustainability is not promoted internally.					
Other	Other*	32		21%	
Total		151		100%	

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: “Environmental responsible measures are included in the company's strategy (e.g. reduction of CO2 emissions) and affect the company's core business”, “Environmental responsible measures are promoted internally (e.g. reduction of water consumption) but do not affect the company's core business” and “Social responsible measures are incorporated in the company's strategy (e.g. top-management opportunities are offered to both women and men) and affect the company's core business” and “Social responsible

measures are promoted internally (e.g. labor rights) but do not affect the company's core business.” were aggregated into “Measures are applied internally” because these options referred to internal measures applied by the company. Alternatively, options that referred to measures applied externally only, were aggregated as “Measures are applied externally”. Answers from employees that chose both alternatives (one internal and one external) were aggregate under the name “Both”.

Table VI-6 - What is the main content of the training provided by your company?

Content	Content *	Number of responses		Percentage	
Theoretical information about sustainability and CSR in a general context.	General information about sustainability	22	83	15%	55%
General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...).					
Policies and practices (specific to the company activities) that should be adopted by the company and its employees.	Specific information to the company sustainability strategy	44		29%	
Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).					
Other	Other*	3		1%	
Total		151		100%	

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: “Theoretical information about sustainability and CSR in a general context.” and “General information about how to act in a sustainable manner and situations in which employees should apply the examples (e.g. reduce water consumption, racism awareness...)” were aggregated as “General information about sustainability”,

once both categories refer to general information that is provided by the company. Every time one of these options was selected alone or combined were “General information about sustainability”. The similar happened to “Policies and practices (specific to the company activities) that should be adopted by the company and its employees.” and “Communication about the company's results and achievements (e.g. inclusion in the Dow Jones Sustainability Index).” that were aggregated as “Specific information to the company sustainability strategy”, because both refer to information directly related to the company sustainability strategy. Answers from employees that chose both alternatives were aggregate under the name “Both”.

Table VI-7 - Are you involved in the sustainability measures developed by your company?

Involvement	Involvement *	Number of responses	Percentage
Yes, my daily job includes sustainability subjects that influence my work.	Yes	125	83%
Yes, even if my work is not directly affected by the measures, I comply with general sustainability guidelines (e.g. reduction of paper and water consumption).			
Yes, I participate in several external activities organized by the company (such as voluntary work or campaigns involving social and / or environmental issues).			
No, even if I know about the sustainability measures, my work does not reflect them.	No	15	10%
No, I know about the measures, but I do not get personal involved.			
No, I do not agree with the measures developed.			
Other	Other*	11	7%
Total		151	100%

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: answers that referred to “yes” options were aggregated into “yes”. Alternatively, options that referred to negative answers were aggregated as “No”.

Table VI-8 - Do you believe your contribution is relevant for the company's sustainable improvements?

Contribution	Contribution *		Number of responses		Percentage	
Yes, all jobs (together) contribute to a more sustainable result.	Group contribution	Both	45	38	30%	25%
Yes, I believe my job is important for more sustainable results.	Individual contribution		57		38%	
Yes, I believe my work is determinant for the company results, including regarding sustainability.						
No, I do not believe my contribution is relevant.	Other*		11		7%	
Total			151		100%	

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: answers which referred the importance of contribution of all jobs together was reclassified as “Group contribution”, while answers that referred the importance of contribution individually were grouped as “Individual contribution”. Answers from employees that chose both alternatives (group and individual) were aggregate under the name “Both”.

Table VI-9 - Do you believe your contribution for the practices implemented by the company are contributing to the environment and society improvement?

Contribution	Contribution *		Number of responses		Percentage	
Yes, because I believe the company's measures contribute to a better society and environment.	Company contribution	Both	77	45	51%	30%
Yes, because I believe my personal contribution helps to build a better society and environment.	Individual contribution		15		10%	
No, I do not believe my contribution is relevant. + Other	Other*		14		9%	
Total	151100%					

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: answers which referred the importance of contribution of the company's measures was reclassified as “Company contribution”, while answers that referred the importance of contribution individually were grouped as “Individual contribution”. Answers from employees that chose both alternatives (company and individual) were aggregate under the name “Both”.

Table VI-10 - Do you know if your company has any board committee to deal with sustainability issues? (For instance, a Corporate Social Responsibility Committee.)

Knowledge	Knowledge *	Number of responses	Percentage
Yes, constituted by only executive members.	Yes	124	82%
Yes, constituted by only non-executive members.			
Yes, constituted by non-executive and executive members.			
No, there is no board committee to deal with sustainability.	No	18	12%
Other	Other*	9	6%
Total		151	100%

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: answers that referred to “yes” options were aggregated into “yes”. Alternatively, options that referred to negative answers were aggregated as “No”.

Table VI-11 - If yes, please could you tell us, the Corporate Social Responsibility Committee's main role and responsibilities.

Knowledge	Knowledge *	Number of responses	Percentage
To plan the company sustainable strategy.	Yes	95	63%
To discuss how sustainable policies will be implemented.			
To assess results achieved by the company.			
To ensure that stakeholders comply with the company corporate values.			
I do not know.	No	23	15%
Other	Other*	33	22%
Total		151	100%

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: answers that identified the Corporate Social Responsibility Committee's main role and responsibilities were aggregated into “yes”. Alternatively, options that referred “I do not know.” answers were aggregated as “No”.

Table VI-12 - Do you participate at board meetings where sustainability is discussed?

Participation	Participation *	Number of responses	Percentage
Yes, every time there is a meeting.	Yes	24	16%
Yes, at least to half of the meetings.			
Yes, at least at one meeting per year.			
No, I do not participate.	No	115	76%
Other	Other*	12	8%
Total		151	100%

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: answers that referred to “yes” options were aggregated into “yes”. Alternatively, options that referred to negative answers were aggregated as “No”.

Table VI-13 - How does this dialogue happen?

Dialogue	Dialogue *		Number of responses		Percentage	
The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate).	Indirect dialogue	Both	44	24	29%	16%
There are specific moments of evaluation of sustainability practices (e.g. questionnaires).						
Meetings are organized between the sustainability board and employees.	Direct Dialogue		40		26%	
Other	Other*		43		28%	
Total			151		100%	

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: “The company always invites the employees to share their opinion (e.g. inform supervisor when appropriate).” and “There are specific moments of evaluation of sustainability practices (e.g. questionnaires).” were defined as an indirect type of dialogue and therefore aggregated as “Indirect dialogue”. Every time one of these options was selected alone or combined were “transformed” into “Indirect dialogue”. The similar happened to “direct” dialogue (Meetings are organized between the sustainability board and employees.). Answers from employees that chose both alternatives (one direct and one indirect) were aggregate under the name “Both”.

Table VI-14 - How does your company promote its sustainability corporate values internally?

Communication	Communication *		Number of responses	Percentage		
Corporate values are communicated during recruitment process.	Formally	Both	92	40	61%	26%
Employees receive formal training (e.g. seminars, conferences, etc.).						
Informal communication (e.g. co-workers share between them the different ideas of the corporate values).	Informally		4		3%	
Other	Other*		15		10%	
Total			151		100%	

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: “Corporate values are communicated during recruitment process.” and “Employees receive formal training (e.g. seminars, conferences, etc.).” were defined as a formal type of communication and therefore aggregated as “Formally”. Every time one of these options was selected alone or combined were “transformed” into “Formally”. The similar happened to “informal” communication. Answers from employees that chose both alternatives (one formal and one informal) were aggregate under the name “Both”.

Table VI-15 - How does your company check the awareness and compliance level with sustainability corporate values internally?

Assessment	Assessment *	Number of responses	Percentage
Employees are assessed about their knowledge of these values.	Formally	62	41%
Employees are rewarded for their practices.			
The company promotes internal/ external auditing to verify compliance.			
There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.	Informally	48	32%
Other	Other*	41	27%
Total		151	100%

*Other – Different answers were considered as errors for SPSS data treatment purposes.

This table illustrates how the different variables were aggregated: “Employees are assessed about their knowledge of these values.”, “Employees are rewarded for their practices.” and “The company promotes internal/ external auditing to verify compliance.” were defined as a formal type of assessment and therefore aggregated as “Formally”. Every time one of these options was selected alone or combined were “transformed” into “Formally”. The similar happened to “informal” assessment (“There is not a formal verification, but employees can inform the appropriate responsible about issues or questions at any time.”). Answers from employees that chose both alternatives (one formal and one informal) were aggregate under the name “Both”.

Annex 7 – Test of Hypotheses

Table VII-1 - Age of responder * Training in SD and/or CSR Crosstabulation

Training in SD and/or CSR * Age of responder Crosstabulation					
Count		Age of responder			
		18-25	26-35	36-45	+46
Training in SD and/or CSR	Training promoted by the employer	6	23	11	8
	Training promoted by the employee	15	16	5	0
	Both	2	28	12	3
	No, I didn't receive any training	4	8	3	3
Total		27	75	31	14

Source: SPSS®

Table VII-2 - Chi-Square Test for Age of responder * Training in SD

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27,231 ^a	9	,001
Likelihood Ratio	29,454	9	,001
Linear-by-Linear Association	,719	1	,396
N of Valid Cases	147		

a. 6 cells (37,5%) have expected count less than 5. The minimum expected count is 1,71.

Source: SPSS®

Table VII-3 - Cramer's V Test for Age of responder * Training in SD

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal	Phi	,430
	Cramer's V	,248
N of Valid Cases	147	

Source: SPSS®

Table VII-4 - Training in SD and/or CSR * Qualifications of responder Crosstabulation

Training in SD and/or CSR * Qualifications of responder Crosstabulation

Count		Qualifications of responder			Total
		Secondary / Middle School	Undergraduated / Bachelor Degree	Master Degree	
Training in SD and/or CSR	Training promoted by the employer	1	23	21	45
	Training promoted by the employee	0	24	12	36
	Both	0	14	26	40
	No, I didn't receive any training	2	11	5	18
Total		3	72	64	139

Source: SPSS®

Table VII-5 - Chi-Square Test for Training in SD and/or CSR * Qualifications of responder Crosstabulation

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18,040 ^a	6	,006
Likelihood Ratio	16,461	6	,011
Linear-by-Linear Association	,041	1	,840
N of Valid Cases	139		

a. 4 cells (33,3%) have expected count less than 5. The minimum expected count is ,39.

Source: SPSS®

Table VII-6 - Cramer's V Test for Training in SD and/or CSR * Qualifications of responder Crosstabulation

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,360	,006
	Cramer's V	,255	,006
N of Valid Cases		139	

Source: SPSS®

Table VII-7 - Training in SD and/or CSR * Job of responder Crosstabulation

Training in SD and/or CSR * Job of responder Crosstabulation

Count		Job of responder		Total
		Non- Management	Management	
Training in SD and/or CSR	Training promoted by the employer	28	17	45
	Training promoted by the employee	25	7	32
	Both	22	18	40
	No, I didn't receive any training	13	3	16
Total		88	45	133

Source: SPSS®

Table VII-8 - Chi-Square Test for Training in SD and/or CSR * Job of responder

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,211 ^a	3	,102
Likelihood Ratio	6,441	3	,092
Linear-by-Linear Association	,241	1	,624
N of Valid Cases	133		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,41.

Source: SPSS®

Table VII-9 - Training in SD and/ or CSR provided by the company * Age of responder Crosstabulation

Training in SD and/ or CSR provided by the company * Age of responder
Crosstabulation

		Age of responder				Total
		18-25	26-35	36-45	+46	
Training in SD and/ or CSR provided by the company	Formally	18	31	16	7	72
	Informally	4	14	7	4	29
	Both	5	31	7	3	46
Total		27	76	30	14	147

Source: SPSS®

Table VII-10 - Chi-Square Test for Training in SD and/ or CSR provided by the company * Age of responder

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,674 ^a	6	,193
Likelihood Ratio	8,676	6	,193
Linear-by-Linear Association	,111	1	,739
N of Valid Cases	147		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 2,76.

Source: SPSS®

Table VII-11 – Training in SD and/ or CSR provided by the company * Qualifications of responder Crosstabulation

Training in SD and/ or CSR provided by the company * Qualifications of responder
Crosstabulation

		Qualifications of responder			Total
		Secondary / Middle School	Undergraduated / Bachelor Degree	Master Degree	
Training in SD and/ or CSR provided by the company	Formally	2	42	25	69
	Informally	1	14	12	27
	Both	0	17	26	43
Total		3	73	63	139

Source: SPSS®

Table VII-12 - Chi – Square Test for Training in SD and/ or CSR provided by the company * Qualifications of responder

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,139 ^a	4	,129
Likelihood Ratio	7,967	4	,093
Linear-by-Linear Association	5,977	1	,014
N of Valid Cases	139		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,58.

Source: SPSS®

Table VII-13 - Training in SD and/ or CSR provided by the company * Job of responder Crosstabulation

Training in SD and/ or CSR provided by the company * Job of responder
Crosstabulation

Count				
		Job of responder		Total
		Non-Management	Management	
Training in SD and/ or CSR provided by the company	Formally	40	25	65
	Informally	18	7	25
	Both	30	13	43
Total		88	45	133

Source: SPSS®

Table VII-14 - Chi-Square for Training in SD and/ or CSR provided by the company * Job of responder

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,251 ^a	2	,535
Likelihood Ratio	1,255	2	,534
Linear-by-Linear Association	1,031	1	,310
N of Valid Cases	133		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,46.

Source: SPSS®

Table VII-15 – Age of responder * Involvement of responder within company's sustainability measures
Crosstabulation

Count				
		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Age of responder	18-25	19	7	26
	26-35	61	8	69
	36-45	32	0	32
	+46	13	0	13
	Total	125	15	140

Source: SPSS®

Table VII-16 – Chi Square Test for Age of responder * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12,596 ^a	3	,006
Likelihood Ratio	15,541	3	,001
Linear-by-Linear Association	10,992	1	,001
N of Valid Cases	140		

a. 3 cells (37,5%) have expected count less than 5. The minimum expected count is 1,39.

Source: SPSS®

Table VII-17 – Cramer's V Test for Age of responder * Involvement of responder within company's sustainability measures Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,300	,006
	Cramer's V	,300	,006
N of Valid Cases		140	

Source: SPSS®

Table VII-18 – Qualifications of responder * Involvement of responder within company's sustainability measures Crosstabulation

Qualifications of responder * Involvement of responder within company's sustainability measures Crosstabulation				
Count		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Qualifications of responder	Secondary / Middle School	1	1	2
	Undergraduated / Bachelor Degree	56	12	68
	Master Degree	60	2	62
	Total	117	15	132

Source: SPSS®

Table VII-19 – Chi-Square Test for Qualifications of responder * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,706 ^a	2	,008
Likelihood Ratio	9,650	2	,008
Linear-by-Linear Association	9,081	1	,003
N of Valid Cases	132		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is ,23.

Source: SPSS®

Table VII-20 – Cramer's V Test for Qualifications of responder * Involvement of responder within company's sustainability measures Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,271	,008
	Cramer's V	,271	,008
N of Valid Cases		132	

Source: SPSS®

Table VII-21 – Job of responder * Involvement of responder within company's sustainability measures Crosstabulation

Job of responder * Involvement of responder within company's sustainability measures Crosstabulation

Count

		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Job of responder	Non-Management	68	14	82
	Management	46	0	46
Total		114	14	128

Source: SPSS®

Table VII-22 – Chi-Square Test for Job of responder * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8,818 ^a	1	,003	,002	,001
Continuity Correction ^b	7,153	1	,007		
Likelihood Ratio	13,418	1	,000		
Fisher's Exact Test					
Linear-by-Linear Association	8,749	1	,003		
N of Valid Cases	128				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,03.

b. Computed only for a 2x2 table

Source: SPSS®

Table VII-23 – Cramer's V Test for Job of responder * Involvement of responder within company's sustainability measures Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	-,262	,003
	Cramer's V	,262	,003
N of Valid Cases		128	

Source: SPSS®

Table VII-24 – Training in SD and/or CSR * Involvement of responder within company's sustainability measures Crosstabulation

Training in SD and/or CSR * Involvement of responder within company's sustainability measures Crosstabulation				
Count		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Training in SD and/or CSR	Training promoted by the employer	42	3	45
	Training promoted by the employee	27	6	33
	Both	41	2	43
	No, I didn't receive any training	12	3	15
Total		122	14	136

Source: SPSS®

Table VII-25 – Chi-Square Test for Training in SD and/or CSR * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,878 ^a	3	,118
Likelihood Ratio	5,641	3	,130
Linear-by-Linear Association	,538	1	,463
N of Valid Cases	136		

a. 4 cells (50,0%) have expected count less than 5. The minimum expected count is 1,54.

Source: SPSS®

Table VII-26 – Training in SD and/ or CSR provided by the company * Involvement of responder within company's sustainability measures Crosstabulation

Training in SD and/ or CSR provided by the company * Involvement of responder within company's sustainability measures Crosstabulation

Count		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Training in SD and/ or CSR provided by the company	Formally	56	12	68
	Informally	25	0	25
	Both	41	3	44
Total		122	15	137

Source: SPSS®

Table VII-27 – Chi-Square Test for Training in SD and/ or CSR provided by the company *
Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,973 ^a	2	,031
Likelihood Ratio	9,372	2	,009
Linear-by-Linear Association	4,782	1	,029
N of Valid Cases	137		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 2,74.

Source: SPSS®

Table VII-28 – Cramer's V Test for Training in SD and/ or CSR provided by the company *
Involvement of responder within company's sustainability measures Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,226	,031
	Cramer's V	,226	,031
N of Valid Cases		137	

Source: SPSS®

Table VII-29 – Content of the training provided by the company * Involvement of responder within company's sustainability measures Crosstabulation

Content of the training provided by the company * Involvement of responder within company's sustainability measures Crosstabulation				
Count		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Content of the training provided by the company	General information about sustainability	15	4	19
	Both	74	5	79
	Specific information to the company sustainability strategy	34	6	40
Total		123	15	138

Source: SPSS®

Table VII-30 – Chi-Square Test for Content of the training provided by the company * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,419 ^a	2	,110
Likelihood Ratio	4,233	2	,120
Linear-by-Linear Association	,015	1	,904
N of Valid Cases	138		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 2,07.

Source: SPSS®

Table VII-31 – Sustainability measures developed by the company * Involvement of responder within company's sustainability measures Crosstabulation

Sustainability measures developed by the company * Involvement of responder within company's sustainability measures Crosstabulation

Count		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Sustainability measures developed by the company	Measures are applied internally	41	7	48
	Measures are applied externally	0	1	1
	Both	64	5	69
Total		105	13	118

Table VII-32 – Chi-Square Test for Sustainability measures developed by the company * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,700 ^a	2	,008
Likelihood Ratio	6,106	2	,047
Linear-by-Linear Association	1,662	1	,197
N of Valid Cases	118		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is ,11.

Table VII-33 – Cramer's V Test for Sustainability measures developed by the company * Involvement of responder within company's sustainability measures Crosstabulation

Symmetric Measures		Value	Approx. Sig.
Nominal by Nominal	Phi	,287	,008
	Cramer's V	,287	,008
N of Valid Cases		118	

Table VII-34 - Involvement of responder within company's sustainability measures * Responder contribution's relevancy for the company's sustainable improvements Crosstabulation

Involvement of responder within company's sustainability measures * Responder contribution's relevancy for the company's sustainable improvements Crosstabulation

Count		Responder contribution's relevancy for the company's sustainable improvements			Total
		Group contribution	Individual contribution	Both	
Involvement of responder within company's sustainability measures	Yes	35	55	35	125
	No	9	2	2	13
Total		44	57	37	138

Source: SPSS®

Table VII-35 – Chi-Square for Involvement of responder within company's sustainability measures * Responder contribution's relevancy for the company's sustainable improvements

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,312 ^a	2	,010
Likelihood Ratio	8,681	2	,013
Linear-by-Linear Association	5,800	1	,016
N of Valid Cases	138		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 3,49.

Source: SPSS®

Table VII-36 – Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements

Crosstabulation

Count

		Responder contribution's relevancy for society and environment sustainable improvements			Total
		Company contribution	Individual contribution	Both	
Involvement of responder within company's sustainability measures	Yes	68	11	43	122
	No	8	4	1	13
Total		76	15	44	135

Source: SPSS®

Table VII-37 – Chi- Square Test for Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,810 ^a	2	,020
Likelihood Ratio	7,464	2	,024
Linear-by-Linear Association	2,745	1	,098
N of Valid Cases	135		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 1,44.

Source: SPSS®

Table VII-38 – Cramer's V Test for Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal	Phi	,241
	Cramer's V	,241
N of Valid Cases	135	

Source: SPSS®

Table VII-39 – Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Responder contribution's relevancy for the company's sustainable improvements *					
Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation					
Count		Responder contribution's relevancy for society and environment sustainable improvements			Total
		Company contribution	Individual contribution	Both	
Responder contribution's relevancy for the company's sustainable improvements	Group contribution	33	7	5	45
	Individual contribution	32	7	15	54
	Both	11	1	25	37
Total		76	15	45	136

Source: SPSS®

Table VII-40 – Chi-Square Test for Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30,759 ^a	4	,000
Likelihood Ratio	31,607	4	,000
Linear-by-Linear Association	26,562	1	,000
N of Valid Cases	136		

a. 2 cells (22,2%) have expected count less than 5. The minimum expected count is 4,08.

Source: SPSS®

Table VII-41 – Cramer's V Test for Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal	Phi	,476
	Cramer's V	,336
N of Valid Cases	136	

Source: SPSS®

Table VII-42 – Involvement of responder within company's sustainability measures * Dialogue about sustainability between company and employees Crosstabulation

Involvement of responder within company's sustainability measures * Dialogue about sustainability between company and employees Crosstabulation

		Dialogue about sustainability between company and employees			Total
		Indirect dialogue	Direct Dialogue	Both	
Involvement of responder within company's sustainability measures	Yes	41	34	23	98
	No	3	5	0	8
Total		44	39	23	106

Source: SPSS®

Table VII-43 – Chi-Square Test for Involvement of responder within company's sustainability measures * Dialogue about sustainability between company and employees Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,465 ^a	2	,177
Likelihood Ratio	4,949	2	,084
Linear-by-Linear Association	,452	1	,501
N of Valid Cases	106		

a. 3 cells (50,0%) have expected count less than 5. The minimum expected count is 1,74.

Source: SPSS®

Table VII-44 – Involvement of responder within company's sustainability measures * Communications about its sustainable values internally Crosstabulation

Involvement of responder within company's sustainability measures * Communications about its sustainable values internally Crosstabulation

		Communications about its sustainable values internally			Total
		Formally	Informally	Both	
Involvement of responder within company's sustainability measures	Yes	83	3	35	121
	No	9	1	3	13
Total		92	4	38	134

Source: SPSS®

Table VII-45 – Chi-Square Test for Involvement of responder within company's sustainability measures * Communications about its sustainable values internally Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,211 ^a	2	,546
Likelihood Ratio	,930	2	,628
Linear-by-Linear Association	,061	1	,805
N of Valid Cases	134		

a. 3 cells (50,0%) have expected count less than 5. The minimum expected count is ,39.

Source: SPSS®

Table VII-46 – Involvement of responder within company's sustainability measures * Evaluation of awareness and compliance Crosstabulation

Involvement of responder within company's sustainability measures * Evaluation of awareness and compliance Crosstabulation

Count		Evaluation of awareness and compliance		Total
		Formally	Informally	
Involvement of responder within company's sustainability measures	Yes	55	44	99
	No	6	3	9
Total		61	47	108

Source: SPSS®

Table VII-47 – Chi-Square Test for Involvement of responder within company's sustainability measures * Evaluation of awareness and compliance Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	,414 ^a	1	,520	,729	,391
Continuity Correction ^b	,086	1	,770		
Likelihood Ratio	,424	1	,515		
Fisher's Exact Test					
Linear-by-Linear Association	,411	1	,522		
N of Valid Cases	108				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,92.

b. Computed only for a 2x2 table

Source: SPSS®

Table VII-48 – Responder contribution's relevancy for the company's sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Responder contribution's relevancy for the company's sustainable improvements *

Evaluation of awareness and compliance Crosstabulation

Count		Evaluation of awareness and compliance		Total
		Formally	Informally	
Responder contribution's relevancy for the company's sustainable improvements	Group contribution	8	19	27
	Individual contribution	31	18	49
	Both	22	10	32
Total		61	47	108

Source: SPSS®

Table VII-49 – Chi-Square Test for Responder contribution's relevancy for the company's sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,797 ^a	2	,005
Likelihood Ratio	10,897	2	,004
Linear-by-Linear Association	8,566	1	,003
N of Valid Cases	108		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 11,75.

Source: SPSS®

Table VII-50 – Cramer's V Test for Responder contribution's relevancy for the company's sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,316	,005
	Cramer's V	,316	,005
N of Valid Cases		108	

Source: SPSS®

Table VII-51 – Responder contribution's relevancy for society and environment sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Responder contribution's relevancy for society and environment sustainable improvements *

Evaluation of awareness and compliance Crosstabulation

Count		Evaluation of awareness and compliance		Total
		Formally	Informally	
Responder contribution's relevancy for society and environment sustainable improvements	Company contribution	35	26	61
	Individual contribution	4	6	10
	Both	20	16	36
Total		59	48	107

Source: SPSS®

Table VII-52 – Chi-Square Test for Responder contribution's relevancy for society and environment sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,053 ^a	2	,591
Likelihood Ratio	1,048	2	,592
Linear-by-Linear Association	,009	1	,924
N of Valid Cases	107		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 4,49.

Source: SPSS®

Table VII-53 – Board Existance * Knowledge about board's main role and responsibilities Crosstabulation

Board Existance * Knowledge about board's main role and responsibilities

Crosstabulation

Count

		Knowledge about board's main role and responsibilities		Total
		Yes	No	
Board Existance	Yes	94	16	110
	No	1	7	8
Total		95	23	118

Source: SPSS®

Table VII-54 – Chi-Square Test for Board Existance * Knowledge about board's main role and responsibilities Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25,294 ^a	1	,000		
Continuity Correction ^b	20,859	1	,000		
Likelihood Ratio	19,140	1	,000		
Fisher's Exact Test				,000	,000
Linear-by-Linear Association	25,080	1	,000		
N of Valid Cases	118				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 1,56.

b. Computed only for a 2x2 table

Source: SPSS®

Table VII-55 – Cramer's V Test for Board Existance * Knowledge about board's main role and responsibilities Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,463	,000
	Cramer's V	,463	,000
N of Valid Cases		118	

Source: SPSS®

Table VII-56 – Board Existence * Responder's participation at Board meetings Crosstabulation

Board Existence * Responder's participation at Board meetings Crosstabulation

Count		Responder's participation at Board meetings		Total
		Yes	No	
Board Existence	Yes	24	99	123
	No	0	16	16
Total		24	115	139

Source: SPSS®

Table VII-57 – Chi-Square Test for Board Existence * Responder's participation at Board meetings Crosstabulation

Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3,773 ^a	1	,052	,074
Continuity Correction ^b	2,531	1	,112	
Likelihood Ratio	6,486	1	,011	
Fisher's Exact Test				
Linear-by-Linear Association	3,746	1	,053	
N of Valid Cases	139			

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,76.

b. Computed only for a 2x2 table

Source: SPSS®

Table VII-58 – Board Existence * Job of responder Crosstabulation

Board Existence * Job of responder Crosstabulation

Count		Job of responder		Total
		Non-Management	Management	
Board Existence	Yes	67	47	114
	No	16	0	16
Total		83	47	130

Source: SPSS®

Table VII-59 – Chi- Square Test for Board Existence * Job of responder Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10,332 ^a	1	,001	,001	,000
Continuity Correction ^b	8,623	1	,003		
Likelihood Ratio	15,607	1	,000		
Fisher's Exact Test					
Linear-by-Linear Association	10,252	1	,001		
N of Valid Cases	130				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,78.

b. Computed only for a 2x2 table

Source: SPSS®

Table VII-60 – Cramer's V Test for Board Existence * Job of responder Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	-,282	,001
	Cramer's V	,282	,001
N of Valid Cases		130	

Source: SPSS®

Table VII-61 – Responder's participation at Board meetings * Involvement of responder within company's sustainability measures Crosstabulation

Responder's participation at Board meetings * Involvement of responder within company's sustainability measures Crosstabulation

		Involvement of responder within company's sustainability measures		Total
		Yes	No	
Responder's participation at Board meetings	Yes	24	0	24
	No	98	15	113
Total		122	15	137

Source:

SPSS®

Table VII-62 – Chi-Square Test for Responder's participation at Board meetings * Involvement of responder within company's sustainability measures Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3,578 ^a	1	,059	,073	,047
Continuity Correction ^b	2,346	1	,126		
Likelihood Ratio	6,158	1	,013		
Fisher's Exact Test					
Linear-by-Linear Association	3,551	1	,059		
N of Valid Cases	137				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,63.

b. Computed only for a 2x2 table

Source: SPSS®

Annex 8 –Duratex

Interview with Duratex

Criação da estratégia de sustentabilidade

A estratégia de sustentabilidade já vinha acontecendo (desde 2006), mas apenas em 2010 se começou a trabalhar para desenvolver a estratégia que a empresa tem hoje. Este processo começou com um diagnóstico geral e a realização de um painel de múltiplos stakeholders. Paralelamente com a estruturação da governança da companhia, não da governança de sustentabilidade apenas mas da governança como um todo. Durante esse processo foram se recolhendo informações que mostraram a necessidade de aperfeiçoar o trabalho desenvolvido na área de sustentabilidade e integrá-lo cada vez mais ao negócio.

Em 2010, quando esse processo estava ainda no início, ainda não existia uma área de sustentabilidade dentro da Duratex. A Duratex faz parte de uma holding, a holding Itausa. Até aí existia apenas uma área de sustentabilidade dentro da holding. A Itausa era responsável pela estratégia de sustentabilidade do grupo industrial.

Com a evolução do trabalho de diagnóstico, em 2012, realizou-se um painel interno com colaboradores, e em 2013, um painel com especialistas da área de sustentabilidade que deu origem à criação do Comitê de Sustentabilidade. Até aí, existia uma Comissão de Sustentabilidade que foi substituída pelo Comitê. A Comissão de Sustentabilidade desenvolvia análises internas dos impactos e coordenava o trabalho desse dentro da área de sustentabilidade que ainda nesse momento não estava dentro da Duratex, mas sim na estrutura da Itausa. Este Comitê está diretamente ligado à alta administração (com o Presidente do Conselho de Administração e outros conselheiros, assim como representantes externos, inclusive o Presidente do Comitê Externo e uma especialista na área de sustentabilidade).

Assim, em 2013, a estratégia de sustentabilidade que a Duratex ganhou vida. Definiram-se temas materiais e criou-se um plano de ação mais estratégico. Esta estratégia de sustentabilidade é a Plataforma 2016. A Plataforma 2016 inclui os objectivos de sustentabilidade para a empresa no médio prazo (até 2016).

Este foi um momento de grandes mudanças na empresa. O processo de governança elegeu um novo Presidente e definiu-se uma nova estratégia que teria que incluir a estruturação da sustentabilidade dentro da Duratex em si para então deixar de atender uma estrutura que atendia as empresas industriais da holding, mas ter uma estrutura própria.

Estratégia em relação à Itausa:

Como a Duratex continua a fazer parte da holding Itausa, apesar de definir uma estratégia de sustentabilidade independente, esta continua a estar relacionada com a estratégia da holding em alguns pontos. Uma vez que os conselheiros são os mesmos, a empresa partilha alguma diretrizes de visão.

Contudo, as empresas que fazem parte da holding têm negócios muito diferentes a cada uma estabelece a sua estratégia de acordo com os temas que são relevantes para si. Por exemplo, os locais onde estão e os seus públicos são diferentes, a natureza dos processos é diferente. Seria complexo ter a mesma estratégia comum, deixariam de se cobrir muitos assuntos relevantes em cada um deles.

Envolvimento dos stakeholders na definição da estratégia de sustentabilidade:

O processo inicial de definição das medidas a desenvolver pela empresa não teve a participação de todos os funcionários, mas teve representantes de todas as áreas da empresa. Para a definição da Plataforma 2016, realizou-se um painel com colaboradores que gerou uma avaliação quantitativa da situação nas diferentes áreas. Tentou-se então incluir as necessidades e características dos funcionários na formulação da estratégia. Por exemplo, ter diversidade de género. Este painel foi conduzido por uma pessoa de fora, de forma a que a informação recolhida fosse neutra.

Mas em 2014, realizou-se uma pesquisa de clima com todos os funcionários que incluiu varias perguntas acerca da questão de sustentabilidade. Esta pesquisa envolveu todos os colaboradores, uma vez que o objectivo seria avaliar como este público tem recebido a informação acerca da área de sustentabilidade.

Stakeholders foram também ouvidos durante o processo de formulação da estratégia de sustentabilidade através do painel de stakeholders que envolveu vários colaboradores. Foram também ouvidos especialistas e o processo foi acompanhado por uma empresa externa que ajudou a Duratex ao longo do processo.

Estrutura da sustentabilidade dentro da empresa

Esta é uma empresa muito hierárquica. Então, o processo de formulação da estratégia começou com a definição das decisões / medidas aplicar feita pelos Diretores, Comité e Conselho. Daí foi para a Directoria e então ao nível da gerência.

Uma estrutura de sustentabilidade foi criada e ela é composta por uma área corporativa de sustentabilidade, que é responsável pela implementação e desenvolvimento da estratégia. Esta área envolve uma constante análise de riscos e oportunidades de forma a manter a estratégia sempre atualizada. Esta estratégia é também desenvolvida tendo em consideração outras áreas de negócios para que haja cada vez mais uma maior integração da estratégia de sustentabilidade em todas as áreas da empresa. Existem ainda mais duas áreas de sustentabilidade, uma específica para cada uma das áreas de negócios: uma para a madeira e outra para Deca.

Essas três áreas de sustentabilidade trabalham de uma forma matricial, de maneira a que haja um representante em cada unidade e que se possa desenvolver o planeamento da estratégia, alinhar objectivos com a alta liderança e integrar (a sustentabilidade) com os negócios via corporativa. Esta estrutura envolve cerca de 40 pessoas.

Trabalho desenvolvido pela área de sustentabilidade

Quando essa estrutura foi criada, a área de sustentabilidade passou a ter mais recursos desenvolver as suas atividades e avançar com o planeamento. Tudo aconteceu mais ou menos ao mesmo tempo, em julho de 2013. O que era os objectivos traçados para 2016, foi-se transformando numa estratégia mais compacta e sólida e mais desenvolvida.

A empresa começou por avaliar as necessidades existentes nas diversas áreas. Na dimensão ambiental, a empresa já estava num estado gerencial e tinha como ambição chegar ao nível estratégico. Isto para que fosse possível ir além de um sistema de gestão que monitorasse indicadores e fizesse planeamento tático, mas que pudesse também desenvolver análises de riscos e oportunidades mais complexas e integradas nos negócios. Isto é, trazendo competitividade via sustentabilidade. Essa análise foi também feita para as outras dimensões (económica, social e de governança).

Identificou-se um *gap* maior na área social. Identificou-se uma grande necessidade de investir para além do cumprimento das leis. A área de governança já se encontrava bastante desenvolvida, o processo de profissionalização da empresa já estava bastante avançado. Identificou-se

que a empresa se encontrava num estágio estratégico e gostaria de permanecer lá. Na área económica, pelos bons resultados que a empresa tem vindo a apresentar e pelo seu momento de expansão, identificou-se que a empresa estava num estágio estratégico e a ideia é permanecer lá.

Seria então necessária dar uma alavancada nos aspectos ambientais e sociais para que se possa fortalecer a integração desses aspectos no planeamento estratégico.

Definição das medidas de sustentabilidade:

O objectivo é inclusão das medidas de sustentabilidade no dia a dia da empresa. Mas a estratégia de sustentabilidade é muito recente (começou em 2013) e demora algum tempo até se conseguir colocar em prática todos os objectivos.

Estratégia ambiental: atividades com impacto direto em recursos naturais

A Duratex é uma indústria e logo tem impactos ambientais muito relevantes. Para dar resposta a necessidades ambientais foi criado o eixo de gestão e desempenho ambiental. A empresa tenta diminuir o impacto direto das suas atividades no ambiente através da melhoria dos seus processos de produção e inclusão de medidas ambientais no seu modelo de negócios.

Esses eixos foram separados em 3 grandes temas: uso eficiente de recursos naturais e energia, gestão de resíduos e afluentes, e conservação da biodiversidade. Determinaram-se também metas de uso eficiente e de gestão absoluta do consumo de recursos como água e energia, de redução de emissão de gases de efeito estufa...

Têm sido desenvolvidos processos de diagnóstico e monitoramento de indicadores ambientais ao menos nos últimos 8 anos de uma maneira bem sólida com auditoria externa e conforme os sistemas do estado impõem, assim outras organizações (por ex. ISO). A empresa tem também trabalhado conjuntamente com outras instituições, como universidades, na pesquisa de soluções nesta área.

Alguns dos projetos da empresa incluem gestão hídrica, a água é um dos aspectos mais delicados e importantes para a empresa, uma vez que as suas atividades têm um grande impacto florestal. Por exemplo, na Deca, o uso final do produto é relacionado diretamente com esse recurso. A Duratex também tem especial interesse na questão da biodiversidade. A biodiversidade além de ser importante para o seu sector porque a empresa tem florestas, é importante para todo o Brasil. O país tem problemas muito sérios nesta área.

A Duratex preocupa-se também em reduzir o impacto que os seus produtos vão ter ao longo da sua vida. A empresa tenta reduzir os seus impactos ambientais em dois momentos: produção e no impacto que o produto vai ter depois que é utilizado. A empresa pensa no ciclo todo e não só no processo produtivo.

Comunicação acerca de sustentabilidade com os funcionários

O processo de contacto com as pessoas vem acontecendo desde que a Plataforma 2016 foi feita, mas está sendo feito gradual. E como é a primeira vez, a área é muito nova (faz um ano agora em Julho 2014), então foi primeiro estruturar a área, e paralelamente ir contando o que é que está acontecendo.

Vários métodos tem sido postos em prática para comunicar com os funcionários aos mais diversos níveis acerca de questões de sustentabilidade e da estratégia da empresa. A empresa distribui entre os líderes de cada área material acerca destas questões que terão depois que distribuir entre os seus funcionários.

A área de comunicação corporativa também está desenvolvendo nesse momento, o material de uma campanha que vai começar em Agosto levando esse planeamento para 100% dos colaboradores. Essa campanha vai incluir o desenvolvimento de um vídeo, para que facilite a conversa em diversos momentos, materiais de comunicação diferentes tanto online, digitais como físicos. Por exemplo, funcionários que trabalham no campo, a única forma de lhes chegar é através de um comunicado junto com a marmita. O objectivo deste comunicado é explicar o que é que é a plataforma, o que é que significa, qual é o compromisso da empresa com ela, quais são os extras, os temas e quais são os programas. Pretende-se assim envolver todos os funcionários da empresa.

Existem também outros projetos especiais de disseminação. Por exemplo as áreas comerciais, marketing e vendas dos dois negócios (Deca e Madeira) estão a passar por uma etapa bastante específica da plataforma estão neste momento a adquirir conhecimento de forma a que se crie capacidade de entendimento em relação à estratégia de sustentabilidade. Isto de forma a que eles possam usar sustentabilidade como um atributo de venda junto dos clientes. E pode também trazer para a empresa oportunidades de riscos que eles identifiquem com esse publico.

Adicionalmente, estão também neste momento a ser realizadas entrevistas, internas e externas, por uma consultora que esta ajudando a empresa.

Comunicação externa acerca de sustentabilidade:

Nos contractos são definidas questões acerca de sustentabilidade e objectivos a serem atingidos pelos parceiros nesta área. Contudo, é importante compreender que o objectivo da Duratex não é credenciar os parceiros, mas sim ajudá-los a evoluir nesta área. Por vezes para muitos desses fornecedores, a Duratex é a única ou principal cliente tendo essa responsabilidade de os ajudar, porque empresa e as suas pessoas dependem da Duratex.

Em 2013, foi realizado um questionário junto dos parceiros externos, que foi aplicado aos principais fornecedores e aqueles que eles pensaram que apresentavam risco. Não àqueles que tem a maior relação comercial, mas também aqueles que foram definidos como prioritários com diferentes critérios.

Através dessa análise inicial, identificaram-se riscos que existem em toda a cadeia. Foram também identificados os stakeholders que apresentavam risco e começou um trabalho que visa a melhoria das práticas destes stakeholders.

Têm também sido desenvolvidas auditorias por fontes externas de forma a que os stakeholders possam um canal seguro para fazer todo o tipo de comunicação que eles precisarem (problema, sugestão, informação). Este canal é também importante para que os stakeholders possam apontar o que é que a empresa precisa melhorar.

Mais precisamente, este ano, tem sido desenvolvida uma pesquisa profunda também para avaliar como estes stakeholders vêem a sustentabilidade da Duratex e outros aspectos da relação comercial.

Avaliação de resultados da estratégia de sustentabilidade:

Estes processos muito novos, esse é o primeiro ano da estratégia (que foi lançada em Agosto 2013). Foi o primeiro ano em que se estabeleceram as metas e essas metas serão apenas revistas em Fevereiro 2015, pelo que ainda não deu tempo para quantificar resultados da estratégia. Apenas aí será possível ver essa quantificação mais precisa. Será apenas em fevereiro porque é necessário terminar de Janeiro até Dezembro a colecta de indicadores, fazer a avaliação pela auditoria externa, uma vez fechada a auditoria externa, a empresa vai ter um numero final para fazer essa análise.

Ainda assim a empresa já pode encontrar outros benefícios. A Duratex estabeleceu as metas e os projetos foram incrementados de acordo com a planificação. Por exemplo ligações diretas como: você tem uma redução absoluta do consumo de água, você vai ter uma redução de custo. Mas para poder fazer uma análise profunda, vai ser necessário fechar esse primeiro ciclo que fecha em Fevereiro 2015.

Outros impactos positivos têm sido “compreendidos” pela empresa através da inclusão em índices de referência, como o DJSI, que indica que a empresa está a atingir as metas. Há também mais reconhecimentos nos media e do mercado. Mas em alguns casos é muito informal e qualitativo.

Importância da estratégia de sustentabilidade:

A estratégia de sustentabilidade é muito importante. Esse ano a empresa está passando por muitos processos de planeamento estratégico. E a sustentabilidade foi considerada nesse planeamento como um critério que tem que ser integrado como todos os outros. Faz parte da estratégia de negociações de maneira transversal. Ou seja, tem também impacto no bolso dos executivos e investidores que procuram mais sustentabilidade. A sua importância pode também ser interpretada pelo facto que as áreas de sustentabilidade também respondem diretamente ao Presidente da empresa.

A importância dada à área de sustentabilidade na empresa também demonstra que a empresa tem a noção de que a sustentabilidade é uma vantagem competitiva e tem benefícios. No entanto, há executivos que pensam de maneira diferentes e têm diferentes “graus” de sustentabilidade. A Duratex é uma empresa antiga e tem funcionários que já estão na empresa há mais de 30 anos e que não compreendem porque tem que mudar agora e fazer as coisas de maneira diferente se sempre foram líderes de mercado.

Para mudar isso, foi desenvolvido um projeto de capacitação de executivos para que aqueles que foram formados numa outra área possam se integrar nessa nova visão que a empresa está desenvolvendo. É preciso entender que este é um processo cultural. Então trabalhar com essa capacitação e dar o as ferramentas e conhecimentos para que cada vez mais se forme esses executivos. Para aprenderem mais e terem o instrumental para poderem aplicar no dia a dia.

A empresa tem também desenvolvido uma análise de sustentabilidade económica para tentar compreender qual é o impacto no negócio propriamente dito. Tentar mostrar que competitividade é um assunto sério, que sustentabilidade é negócio e que é fonte de vantagens competitivas para a empresa. Existe alguma resistência, mas é natural... É um processo que vai evoluindo, vai sendo construindo. Há obviamente custos associados, mas espera-se que os benefícios superem os custos. Sustentabilidade é portanto um investimento.

Mas a estratégia de sustentabilidade é agora vista também no longo prazo. A empresa já começou o planeamento de uma visão de longo prazo até 2020.

Empresa de mercado em desenvolvimento

(Esta uma resposta pessoal, que envolve opiniões pessoais, e não a posição da empresa.)

Estar presente num mercado em desenvolvimento tem um grande impacto na forma como a empresa desenvolve a sua estratégia de sustentabilidade. A empresa não está isolada, desenvolve as suas atividades numa comunidade e impacta essas comunidades. Assim como também é impactada pelas características dessas mesmas comunidades.

É necessário desenvolver uma escuta ampla e considerar as necessidades da comunidade durante o desenvolvimento de políticas de inclusão social e ambiental. Há várias questões que em países mais desenvolvidos já estão mais bem desenvolvidas, os problemas / prioridades não são os mesmos.

No caso específico do Brasil, trata-se de uma economia em que as pessoas têm pouca confiança nos sistemas políticos e uma grande desconfiança das organizações. São também registados altos níveis de corrupção no país. As empresas tem ainda outras limitações, por exemplo, existe uma carga de impostos muito grande ou enfrentam problemas como *gaps* de talentos em cidades pequenas, iliteracia... Tudo isto vai influenciar no momento de desenvolvimento de políticas internas, como por exemplo políticas de corrupção e ética.

Contudo, estas condições não são nem uma desvantagem nem uma vantagem, porque a realidade de cada um é a realidade de cada um e as empresas têm que se adaptar em todas as circunstâncias. Em países desenvolvidos há outras questões e problemas como a diminuição do crescimento, excesso de consumo, entre outros. Ainda assim, por vezes o cenário vivido nos países emergentes pode causar várias dificuldades às empresas, dificuldades essas que as empresas não teriam em países desenvolvidos. Por exemplo, num país em que a distribuição social é inexistente, as empresas têm que se ocupar desse papel, enquanto noutros países são as instituições governamentais que o fazem.

Inclusão no DJSI

A Duratex valoriza muito a inclusão no DJSI. Esta é uma arma muito poderosa, pois trata-se de um referencial muito bem preparado e bem feito que ajuda a desenvolver a sustentabilidade dentro da empresa. A empresa quer estar no DJSI.

A inclusão é bastante importante na hora que as ações da empresa são negociadas, ou seja tem um impacto direto e económico muito grande. É um selo que toda a gente quer ter, porque aumenta a confiança dos investidores, principalmente internacionais. A Duratex faz também parte de outros índices de referência no Brasil.

É também um referencial externo de um ponto de vista bem avançado que ajuda a desenvolver a sustentabilidade dentro da empresa. Há também ainda, a inclusão de questões /critérios sociais e ambientais na sua avaliação que ajuda muito a definir o foco as iniciativas a serem desenvolvidas. O DJSI e outros modelos ajudam anualmente a analisar se as práticas da empresa estão dentro do benchmark de mercado e a definir como é que eles pode evoluir. Estas referências dão um diagnóstico importante.

Hypotheses Test of Duratex

Table VIII-1 - Training in SD and/or CSR * Age of responder Crosstabulation

Training in SD and/or CSR * Age of responder Crosstabulation						
Count		Age of responder				Total
		18-25	26-35	36-45	+46	
Training in SD and/or CSR	Training promoted by the employer	6	17	8	6	37
	Training promoted by the employee	14	14	2	0	30
	Both	2	19	7	2	30
	No, I didn't receive any training	4	7	3	3	17
	Total	26	57	20	11	114

Source: SPSS®

Table VIII-2 – Chi-Square Test for Training in SD and/or CSR * Age of responder Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22,042 ^a	9	,009
Likelihood Ratio	24,616	9	,003
Linear-by-Linear Association	,303	1	,582
N of Valid Cases	114		

a. 6 cells (37,5%) have expected count less than 5. The minimum expected count is 1,64.

Source: SPSS®

Table VIII-3 – Cramer Test for Training in SD and/or CSR * Age of responder Crosstabulation

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal		
Phi	,440	,009
Cramer's V	,254	,009
N of Valid Cases	114	

Source: SPSS®

Table VIII-4 – Training in SD and/or CSR * Qualifications of responder Crosstabulation

Training in SD and/or CSR * Qualifications of responder Crosstabulation					
Count		Qualifications of responder			Total
		Secondary / Middle School	Undergraduated / Bachelor Degree	Master Degree	
Training in SD and/or CSR	Training promoted by the employer	1	17	18	36
	Training promoted by the employee	0	20	10	30
	Both	0	10	18	28
	No, I didn't receive any training	2	10	5	17
Total		3	57	51	111

Source: SPSS®

Table VIII-5 – Chi-Square Test for Training in SD and/or CSR * Qualifications of responder Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13,970 ^a	6	,030
Likelihood Ratio	13,239	6	,039
Linear-by-Linear Association	,446	1	,504
N of Valid Cases	111		

a. 4 cells (33,3%) have expected count less than 5. The minimum expected count is ,46.
Source: SPSS®

Table VIII-6 – Cramer Test for Training in SD and/or CSR * Qualifications of responder Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,355	,030
	Cramer's V	,251	,030
N of Valid Cases		111	

Source: SPSS®

Table VIII-7 – Involvement of responder within company's sustainability measures * Age of responder Crosstabulation

Involvement of responder within company's sustainability measures * Age of responder

Crosstabulation

Count	Age of responder				Total
	18-25	26-35	36-45	+46	
Involvement of responder Yes	18	44	21	10	93
within company's sustainability measures No	7	6	0	0	13
Total	25	50	21	10	106

Source: SPSS®

Table VIII-8 – Chi-Square Test for Involvement of responder within company's sustainability measures * Age of responder Crosstabulation

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,090 ^a	3	,018
Likelihood Ratio	12,557	3	,006
Linear-by-Linear Association	8,847	1	,003
N of Valid Cases	106		

a. 3 cells (37,5%) have expected count less than 5. The minimum expected count is 1,23.

Source: SPSS®

Table VIII-9 – Cramer Test for Involvement of responder within company's sustainability measures * Age of responder Crosstabulation

Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	,309	,018
Cramer's V	,309	,018
N of Valid Cases	106	

Source: SPSS®

Table VIII-10 – Involvement of responder within company's sustainability measures * Qualifications of responder Crosstabulation

Involvement of responder within company's sustainability measures *
Qualifications of responder Crosstabulation

Count	Qualifications of responder			Total
	Secondary / Middle School	Undergraduated / Bachelor Degree	Master Degree	
Involvement of responder Yes	1	41	48	90
within company's sustainability measures No	1	10	2	13
Total	2	51	50	103

Source: SPSS®

Table VIII-11 – Chi Square Test for Involvement of responder within company's sustainability measures * Qualifications of responder Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,161 ^a	2	,017
Likelihood Ratio	8,051	2	,018
Linear-by-Linear Association	7,754	1	,005
N of Valid Cases	103		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is ,25.

Source: SPSS®

Table VIII-12 – Cramer Test for Involvement of responder within company's sustainability measures * Qualifications of responder Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,281	,017
	Cramer's V	,281	,017
N of Valid Cases		103	

Source: SPSS®

Table VIII-13 – Involvement of responder within company's sustainability measures * Job of responder Crosstabulation

Involvement of responder within company's sustainability measures * Job of responder Crosstabulation			
Count	Job of responder		Total
	Non-Management	Management	
Involvement of responder Yes within company's sustainability measures	52	30	82
No	12	0	12
Total	64	30	94

Source: SPSS®

Table VIII-14 – Chi Square test for Involvement of responder within company's sustainability measures * Job of responder Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6,448 ^a	1	,011	,008	,007
Continuity Correction ^b	4,874	1	,027		
Likelihood Ratio	10,030	1	,002		
Fisher's Exact Test					
Linear-by-Linear Association	6,380	1	,012		
N of Valid Cases	94				

- a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,83.
b. Computed only for a 2x2 table

Source: SPSS®

Table VIII-15 – Cramer test for Involvement of responder within company's sustainability measures *
Job of responder Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	-,262	,011
	Cramer's V	,262	,011
N of Valid Cases		94	

Source: SPSS®

Table VIII-16 – Involvement of responder within company's sustainability measures * Training in SD and/ or CSR provided by the company Crosstabulation

Involvement of responder within company's sustainability measures *
Training in SD and/ or CSR provided by the company Crosstabulation

Count

	Training in SD and/ or CSR provided by the company			Total
	Formally	Informally	Both	
Involvement of Yes responder within company's sustainability measures	39	21	31	91
No	11	0	2	13
Total	50	21	33	104

Source: SPSS®

Table VIII-17 – Chi-Square Test for Involvement of responder within company's sustainability measures * Training in SD and/ or CSR provided by the company Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,377 ^a	2	,015
Likelihood Ratio	10,588	2	,005
Linear-by-Linear Association	6,446	1	,011
N of Valid Cases	104		

- a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 2,63.

Source: SPSS®

Table VIII-18 – Cramer Test for Involvement of responder within company's sustainability measures * Training in SD and/ or CSR provided by the company Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,284	,015
	Cramer's V	,284	,015
N of Valid Cases		104	

Source: SPSS®

Table VIII-19 – Involvement of responder within company's sustainability measures * Sustainability measures developed by the company Crosstabulation

Involvement of responder within company's sustainability measures * Sustainability measures developed by the company Crosstabulation

Count

	Sustainability measures developed by the company			Total
	Measures are applied internally	Measures are applied externally	Both	
Involvement of Yes	35	0	49	84
responder within	7	1	3	11
company's sustainability No				
measures				
Total	42	1	52	95

Source: SPSS®

Table VIII-20 – Chi-Square Test for Involvement of responder within company's sustainability measures * Sustainability measures developed by the company Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,413 ^a	2	,005
Likelihood Ratio	7,319	2	,026
Linear-by-Linear Association	2,766	1	,096
N of Valid Cases	95		

a. 3 cells (50,0%) have expected count less than 5. The minimum expected count is ,12.

Source: SPSS®

Table VIII-21 – Cramer Test for Involvement of responder within company's sustainability measures * Sustainability measures developed by the company Crosstabulation

Symmetric Measures		Value	Approx. Sig.
Nominal by Nominal	Phi	,331	,005
	Cramer's V	,331	,005
N of Valid Cases		95	

Source: SPSS®

Table VIII-22 – Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements

Crosstabulation

Count	Responder contribution's relevancy for society and environment sustainable improvements			Total
	Company contribution	Individual contribution	Both	
Involvement of Yes	54	9	28	91
responder within	7	4	1	12
company's sustainability No				
measures				
Total	61	13	29	103

Source: SPSS®

Table VIII-23 – Chi-Square for Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,514 ^a	2	,039
Likelihood Ratio	5,918	2	,052
Linear-by-Linear Association	1,507	1	,220
N of Valid Cases	103		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 1,51.

Source: SPSS®

Table VIII-24 – Cramer for Involvement of responder within company's sustainability measures * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal Phi	,251	,039
Cramer's V	,251	,039
N of Valid Cases	103	

Source: SPSS®

Table VIII-25 – Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation					
Count		Responder contribution's relevancy for society and environment sustainable improvements			Total
		Company contribution	Individual contribution	Both	
Responder contribution's relevancy for the company's sustainable improvements	Group contribution	30	6	4	40
	Individual contribution	28	6	9	43
	Both	3	1	16	20
Total		61	13	29	103

Source: SPSS®

Table VIII-26 – Chi Square Test for Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34,271 ^a	4	,000
Likelihood Ratio	32,465	4	,000
Linear-by-Linear Association	26,683	1	,000
N of Valid Cases	103		

a. 1 cells (11,1%) have expected count less than 5. The minimum expected count is 2,52.
Source: SPSS®

Table VIII-27 – Cramer Test for Responder contribution's relevancy for the company's sustainable improvements * Responder contribution's relevancy for society and environment sustainable improvements Crosstabulation

Symmetric Measures		
	Value	Approx. Sig.
Nominal by Nominal Phi	,577	,000
Cramer's V	,408	,000
N of Valid Cases	103	

Source: SPSS®

Table VIII-28 – Responder contribution's relevancy for the company's sustainable improvements *
Evaluation of awareness and compliance Crosstabulation

Responder contribution's relevancy for the company's sustainable improvements *
Evaluation of awareness and compliance Crosstabulation

Count		Evaluation of awareness and compliance		Total
		Formally	Informally	
Responder contribution's relevancy for the company's sustainable improvements	Group contribution	6	19	25
	Individual contribution	24	14	38
	Both	8	8	16
Total		38	41	79

Source: SPSS®

Table VIII-29 – Chi-Square Test for Responder contribution's relevancy for the company's sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,291 ^a	2	,010
Likelihood Ratio	9,652	2	,008
Linear-by-Linear Association	3,963	1	,047
N of Valid Cases	79		

Source: SPSS®

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,70.

Table VIII-30 – Cramer Test for Responder contribution's relevancy for the company's sustainable improvements * Evaluation of awareness and compliance Crosstabulation

Symmetric Measures		Value	Approx. Sig.
Nominal by Nominal	Phi	,343	,010
	Cramer's V	,343	,010
N of Valid Cases		79	

Source: SPSS®

Table VIII-31 – Board Existence * Knowledge about board's main role and responsibilities Crosstabulation

Board Existence * Knowledge about board's main role and responsibilities
Crosstabulation

Count		Knowledge about board's main role and responsibilities		Total
		Yes	No	
Board Existence	Yes	63	14	77
	No	0	7	7
Total		63	21	84

Source: SPSS®

Table VIII-32 – Chi-Square Test for Board Existence * Knowledge about board's main role and responsibilities Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22,909 ^a	1	,000		
Continuity Correction ^b	18,753	1	,000		
Likelihood Ratio	21,455	1	,000		
Fisher's Exact Test				,000	,000
Linear-by-Linear Association	22,636	1	,000		
N of Valid Cases	84				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 1,75.

b. Computed only for a 2x2 table

Source: SPSS®

Table VIII-33 – Cramer Test for Board Existence * Knowledge about board's main role and responsibilities Crosstabulation

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	,522	,000
	Cramer's V	,522	,000
N of Valid Cases		84	

Source: SPSS®

Table VIII-34 – Board Existence * Job of responder Crosstabulation

Board Existence * Job of responder Crosstabulation				
Count		Job of responder		Total
		Non-Management	Management	
Board Existence	Yes	50	30	80
	No	15	0	15
Total		65	30	95

Source: SPSS®

Table VIII-35 – Chi-Square Test for Board Existence * Job of responder Crosstabulation

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8,221 ^a	1	,004		
Continuity Correction ^b	6,577	1	,010		
Likelihood Ratio	12,644	1	,000		
Fisher's Exact Test				,002	,002
Linear-by-Linear Association	8,135	1	,004		
N of Valid Cases	95				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 4,74.

b. Computed only for a 2x2 table

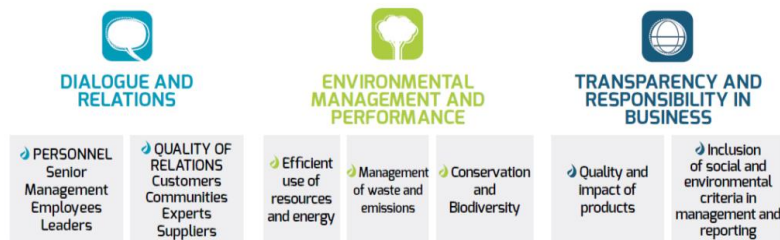
Source: SPSS®

Table VIII-36 – Cramer Test for Board Existence * Job of responder Crosstabulation

Symmetric Measures		Value	Approx. Sig.
Nominal by Nominal	Phi	-,294	,004
	Cramer's V	,294	,004
N of Valid Cases		95	

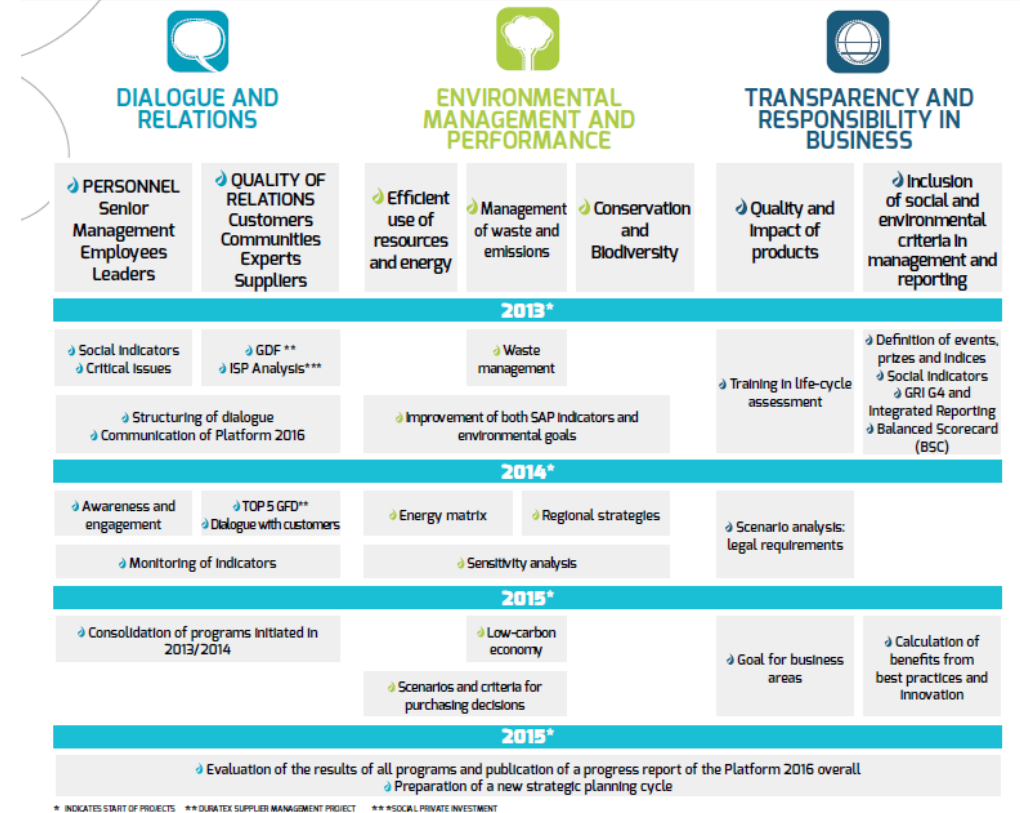
Source: SPSS®

Figure VIII-1 - Duratex Sustainability Strategy Lines of Action



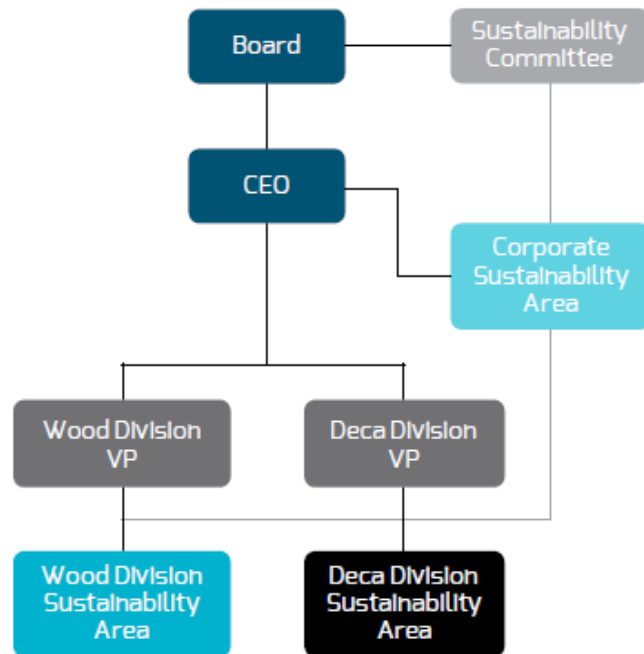
Source: Duratex (2013, p. 7)

Figure VIII -2 - Duratex Sustainability Goals



Source: Duratex (2013, p. 8)

Figure VIII -3 - Duratex Corporate Sustainability Structure



Source: Duratex (2013, p. 5)

Duratex Environmental Policy Management

- Make use of natural resources, raw materials and inputs necessary for production processes in a rational and sustainable manner;
- Develop and offer products that enable rational use of natural resources;
- Prevent pollution and environmental risks in its activities, and take action to reduce greenhouse gas emissions through innovative technical solutions, mitigating their impact;
- Comply with the legislation applicable to its activities, products and services, meet voluntary commitments undertaken by the organization, and establish procedures to ensure that inputs of illegal origin are not utilized;
- Protect biodiversity, springs and watercourses, and conserve cultivated soil. These are measures inherent to management of forest plantations;
- Perform residue management in a manner that is convergent to the concept of reduction, recycling and reuse;

Continuous Improvement

- Seek continuous improvement of its environmental performance through management models, periodical evaluation of results, innovation and technologies;
- Ensure incorporation of practices and processes aimed at the occupational health and safety of employees in the company's activities;
- Implement training programs and qualification that lead to the adoption of safe and healthy behavior and respect for the environment;
- Establish management tools specific to the nature and size of each principle in all of the organization's business units;

Communication

- Maintain communication channels with stakeholders regarding environmental, social, product and service aspects;
- Document and publicize the scope and results achieved in meeting the social and environmental commitments undertaken voluntarily by the company.